The Catholic Church and Healing

by Dr James Joseph Walsh

Series Introduction

For nineteen hundred years the Catholic Church has been in intimate relation with the healing of mankind, body and soul. The Church has been a consistent and persistent patron of medicine, and the records of that patronage are available for those who are interested in the subject. It is easy to understand, then, how hard it has been to try to compress the story of the Church's relations to healing into a brief sketch of this kind. I have here set down only the most important facts, the high lights of medical development down the centuries. Anyone who hopes to understand even a little the role of the Catholic Church has played in relieving suffering must consult large works, of which there are many available and to which this little book may serve as an introduction.

Fortunately in recent years there has come a far-reaching development of interest in medical history, and this has been followed by an equally significant accumulation of information. Until the end of the nineteenth century it was rather the custom to think of physicians and surgeons of the olden times as knowing almost nothing about medicine and surgery as they have developed in our day, but the more we have come to know of old-time medicine the more surprise there has been at the number of anticipations of our modern medicine and surgery that are to be found even many centuries ago. Our ancestors could think in medicine as in most other departments of human interest, and they did so.

With most of what has been accomplished in medicine the Church has been very closely associated. Ecclesiastics brought about the eradication of leprosy. This revealed the significance of contagion and the possibility of the prevention of disease by quarantine - facts hidden from the Greeks. They applied the knowledge thus acquired to other problems of disease with distinct success. If the Church's influence had secured nothing more than this in medicine, it would have been a wonderful triumph. That was, however, only a single item of many medical and surgical advances. Monasteries preserved medical traditions and supplied drugs from the monastery gardens. The Church's influence can be traced in the development of surgery

and anatomy as well as in hospitals and asylums for the insane and medical teaching, so that there is scarcely a phase of medicine that is not deeply indebted to the Catholic Church. The story of it all I have tried to tell briefly here.

Editor's Preface

Those acquainted with the action and nature of the Catholic Church, and particularly those who, like the author of the ensuing pages, have a full acquaintance with its past, may everywhere discover what looks at first like self-contradiction, or at the best, paradox.

There is, for instance, a watch over and repression of the senses, and yet something like a command for natural living, and a spiritual product of gaiety. There is (and in the Catholic Church alone, of all ethical systems). an insistence upon humility; yet nowhere is strength more demanded. There is an insistence upon faith, and at the same time an indifference to the visualization of the thing believed, so that a man within that influence firmly believes on authority many a doctrine - the Trinity, for example - which it is impossible for the human mind to visualize. Yet at the same time there is a delight in the use of image and symbol as aids to religion. There is the special praise of virginity, and the practice of celibacy in the secular clergy, and the vow of chastity in the religious orders, and yet a detestation of any restriction in the natural increase of the human race.

So one might continue the list till it would seem interminable.

Now high among these apparent contradictions may be set the doctrine that human life is but a brief ordeal which, properly passed, leads to eternal beatitude, of which death is the entry, and at the same time a strict doctrine forbidding the acceleration of death in any fashion whatsoever, even in cases of great physical suffering. Side by side with this you have a contempt for the pains and pleasures of the body compared with those of the soul, and yet such anxiety for healing as no other ethical system has ever shown.

It is upon this last that Dr. Walsh insists with his great wealth of learning; and perhaps the most remarkable conclusion of his scholarship - the one which will most seem novel to the non-Catholic modern reader - is the historical truth that it was the Catholic Church which produced the institution of the hospital, and

the universality of the art of healing throughout all society.

How long the non-Catholic side of the modern world will remain ignorant of the work of the Church in the building-up of all our civilization, none can tell. But personally, I do not think that the interval will be a great one. I think it possible that educated people at least within a lifetime will be generally acquainted with the fact that all that we have added to the culture of the pagan world has been added by the Faith.

But I suppose there is no department in which this truth is less familiar than in the department of healing. There has been very great progress in the *knowledge* of the human frame and the nature and cure of disease, and the rest of it, since the period when the universal culture of Europe broke up and the Faith ceased to be universal. That truth applies to medicine, as it does to almost all branches of experimental science. But the application of this particular science and the motive for such application is quite a different matter from knowledge in it. The Middle Ages did not know as much about the body and drugs and surgery as we do, nor did the seventeenth and eighteenth centuries know as much as the nineteenth: for knowledge based upon experiment necessarily expands with time, at least, so long as the series of experiments continues. But nothing is more remarkable than the way in which the desire to use such knowledge for the good of mankind was damaged by the Reformation. Almost as remarkable is the contrast between the pagan and the Catholic motive upon the point of universality. The pagan world studied healing for the relief of those who could afford medicine, for the preservation of the lives and working power of slaves. The Catholic Church considered it for the first time in its application to the whole human race, *but especially to the poor*.

And here there will occur to every thoughtful man a consideration which not all thoughtful men will care to entertain for long, but which the wiser among them at least will ponder upon. It is this: If paganism returns, shall we continue this universal application of our medical knowledge to the advantage of the human race - and especially the poor? In the abandonment all around us of those doctrines which the world has inherited from the Catholic Church,

no small part of the original ethical structure remains. It would seem to be dissolving; still, no small part remains. Now what guarantee have we that this fragment of the old ethical structure which was based upon dogma will survive? The world outside the Church is changing its ethical mood very rapidly. The normal trend of the process should be paganism. What motive is there in paganism for a universal care of the poor? And the application to them of knowledge and a sacrifice for them of the wealth which knowledge can procure for its possessor? - *The Editor*

Introduction

As Christ Himself went about healing as well as preaching, it was only to be expected that the Church founded by Him should be interested in the sick and those in need. Miracles of healing were the proofs of the divine mission of the Messiah Himself, and these continued at the hands of the apostles as a demonstration that the spirit of the Messiah was still with them. The most interesting feature of the Church's relation to medicine in the early days is to be found in the fact that Luke, who wrote the third gospel but who also wrote the Acts of the Apostles, was a physician. In the early days of the so-called Higher Criticism of the Bible, serious doubts were thrown on the truth of this tradition of Saint Luke's being a physician, but the most recent re-examination of the documents makes it perfectly clear that Luke was beyond all doubt a physician. Sir William Ramsay, in his *Luke the Physician and Other Studies in the History of Religion*, demonstrates clearly that Luke was a physician; and Harnack, the well-known German student of biblical subjects, confirmed this in his volume, *Luke the Physician*.

As Harnack said, "Jesus appeared the great physician and healer. All the evangelists say this of Him; hence it is not surprising that one of them has set this phase of His ministry in the foreground and has regarded it as the most important." He points out that, in Luke

> the description of particular cases of disease shows distinct traces of medical diagnosis and scientific knowledge. The language even where questions of medicine are not touched upon is colored by medical phraseology and where the author speaks as an eye witness medical traits are especially and prominently apparent.

All this makes it very clear that the author was a physician; but, besides, it furnishes very definite evidence that the miracles of Christ were not merely mental healings, but that they were real exercises of His divine power - for Luke brings out the fact very clearly in a number of cases that the patients were suffering from true organic disease which could have been cured only by

supernatural power.

Nothing demonstrates better than this fact the providential elements in the writings of the account of the life of the Lord and His miracles. A Greek physician of the scholarly tradition of Greek medicine from Hippocrates to Galen, providing in the very first generation of Christianity medical certification for the healings of the Lord, constitutes the best possible testimony for future ages to the reality and significance of these healings as evidence for His divinity.

Professor Adolph Harnack, already mentioned, began his career in the study of Christian antiquities with a monograph, *Medical Features of Early Christianity* (1902), in which he has gathered a large amount of information with regard to the relations of the Church and the medical profession. He mentions altogether some sixteen physicians who reached distinction in the early stage of Christianity. Some of these were priests and some of them bishops; as, Theodotos of Laodicea; Eusebius, bishop of Rome; Basilios, bishop of Laodicea; and at least one, Hierakas, was the founder of a religious order. The first Christian physicians came mainly from Syria as might be expected, for here the old Greek medical traditions were alive and active. Among the early Greek physicians were Cosmas and Damien, physicians who were martyred in the persecution of Diocletian and who have been chosen as the patrons of the medical profession. The Emperor Justinian erected a famous church, dedicated to them, which became the scene of pilgrimages. Christian medical organizations of various kinds, colleges, medical societies and the like, have ever since been named after them.

Some idea of the interest of ecclesiastics in medical affairs may be gathered from a letter of Bishop Theodoret of Cyrus, directed to the prefect of the city, when he was about to leave the place. He wrote:

> When I took up the Bishopric of Cyrus I made every effort to bring in from all sides the arts that would be useful to the people. I succeeded in persuading skilled physicians to take up their residence here. Among these is a very pious priest, Peter, who practises medicine with great skill, and is well known for his care for the people. Now that I am

> about to leave the city, some of those who came at my invitation are preparing also to go. Peter seems resolved to do this. I appeal to your highness, therefore, in order to commend him to your special care. He handles patients with great skill and brings about many cures.

The first distinguished Christian physician in the history of medicine was Aetius of Amida, whose writings have become a classic. His medical studies were made at Alexandria; and having attracted attention by his medical learning and skill, he became physician to the emperors at Byzantium probably beginning with Justinian. He mentions Christian mysteries and appeals to the name of the Savior and the martyrs. He is distinctly scientific in his treatment of medical subjects and he is much richer in pathology, the scientific basis of medicine, than most of the older writers. Gurlt, the well-known German historian of surgery, says that Aetius treats pathology much more extensively than even Paul of Aegineta who is one of the most important of the medical writers of that time. Aetius says a great deal about drugs but he also treats of other remedial measures, dietetic, manipulative and surgical. He used venesection, cupping, leeches and the like, and his fourth and fifth books take up hygiene and special dietics. Aetius's treatment of such subjects as goiter, varicose veins and of the tonsils, which are to be removed if hypertrophied, is so modern in some ways as to be very striking.

Aetius was thoroughly appreciated by his contemporaries, and his writings were faithfully preserved through all the vicissitudes of the times down to the introduction of printing, in spite of the time and labor required for making copies. The monastic scribes made no mistake in perpetuating his works. As soon as he appeared in print he received a hearty welcome. At the time of the Renaissance Aetius came to be very much thought of. Cornelius (Agrippa) declared that the early Christian physician's work contained all that could be found in such writers as Galen and Oribasius and Paul of Aegina and even more. In his time, the early eighteenth century, Boerhaave declared that the works of Aetius are of as much importance to the physician as were the Pandects of Justinian for lawyers.

Even more important than Aetius was his colleague of the next century, Alexander of Tralles. His father was a physician as was also a brother, Dioscorus. Altogether, four of his brothers reached such distinction in their life work that their names have come down to us through nearly fifteen hundred years. The eldest of them was Anthemios, the builder of the great church of Santa Sophia in Constantinople. A second brother was Metrodoros, a distinguished grammarian, and a third was a prominent jurist in Constantinople. The careers of this family make it rather clear that conditions were very much the same in Asia Minor as regards the relations between the Church and education and science as they are at the present time.

It might be expected that the brother of the man who designed Santa Sophia would not be without distinction in anything that he applied himself to. Alexander wandered throughout the known world of his time, Italy, Gaul, Spain and Africa, everywhere gathering medical knowledge and medical experience. Then he settled down in Rome where he seems to have been a teacher of medicine, and some of the books we have from him are in the form of academic lectures. He seems to have made a great success in Rome; and he lived to be past eighty, dying probably during the first decade of the seventh century. His writings are very much valued at the present time and modern German authorities on the history of medicine insist that he was not only a man of wide information but thoughtful and discriminating, and it is very evident that he made careful observations for himself. It is surprising to find in how many ways he has anticipated the conclusions of modern science with regard to the treatment of such affections as epilepsy, hemorrhage from the lungs, and other difficult therapeutic problems. For cough he recommended the careful use of opium, but also the breathing of steam impregnated with various ethereal resins. For consumption he recommended an abundance of milk with a nutritious diet as digestible as possible, and advised, as a good auxiliary, change of air, a sea voyage or a stay at a watering place. The more one knows of these early medical traditions in Christian times, the more one thinks of them.

The influence of the Church in the early Middle Ages was exerted very happily for the development of the science of healing as well

as for the exercise of charity. The old Greek tradition of medicine which we are coming to appreciate more and more in our day was fostered, and the works of the early Christian physicians closely in touch with it were preserved by the copyists in the monasteries; and after the invention of printing they exerted a great deal of influence at the time of the Renaissance. I have mentioned the striking examples among these early Christian physicians who were to be most appreciated a thousand years later, but there were a number of others who might have been given place here if space had permitted. Their names and something of what they did for medicine and surgery will be found in my volume *Old Time Makers of Medicine*.

Hospitals and Christianity

The hospital in our modern sense of the term, as an institution in which the ailing poor are cared for, is entirely owed to Christianity. Under the Greeks and the Romans there were hospitals for slaves and for soldiers but not for the poor. Originally the word meant "guest house" and only later came to be limited to ailing guests. In the early days of Christianity the deacons and deaconesses cared for the ailing in their own homes, but the Church also provided special quarters for those who had none. Often the bishop's house provided a refuge for those who had no place to go, and one of the corporal works of mercy was "to harbor the harborless." Sometimes, as we have seen, the bishops were themselves physicians. During the first centuries of Christianity none of these charitable works could be carried out openly because of the danger of persecution. There is no doubt, however, that in spite of this much was done for the benefit of the ailing poor.

Just as soon after the battle of the Milvian Bridge as the Church was free to engage in public works, hospitals became one of the features of Church life. Basil, the great Greek father of the Church, might well be taken as the incarnation of the spirit of Chrisianity at the time. His greatest work was the hospital established at the gates of Caesarea which became so large an institution with so many buildings for its different departments that it was called "New Town." Gregory of Nazianzen, Basil's friend, said of this hospital which had been called, after Basil, the Basilias, "It would be reckoned among the miracles of the world so numerous were the poor and sick that came hither and so admirable was the care and order with which they were served."

> Before the gates of Caesarea called by Basil out of nothing rose a new city devoted to works of charity and to nursing the sick. Well built and furnished houses stood on both sides of streets, symmetrically laid about the Church and contained the rooms for the sick and infirm of every variety who were entrusted to the care of doctors and nurses.

Another early hospital in the east was that founded by Saint John Chrysostom at Constantinople (about 400) and which is mentioned by Palladius. It is said to have been commodious with many buildings and "well supplied with physicians and attendants for the sick - and cooks."

Western Christianity was just as enthusiastic in its establishment of hospitals as the East. In 390, under the guidance of Saint Jerome, Fabiola, daughter of the ancient patrician family of the Fabii, built the first general public hospital in Rome. Jerome speaks of this as a *nosocomium*, a name which indicates that it was a place for the care of the ailing and not merely for the poor and helpless. Paula, who did so much to help Saint Jerome in his translations of the prophets, was a close friend of Fabiola, and was deeply interested in hospital work. On the road to Bethlehem, when she lived in the Holy Land, Paula built hospices for pilgrims and hospitals for the sick in which she herself and her staff of dependents served untiringly. Lecky says she also established a hospital in Jerusalem. The buildings she erected were low and plain; but it were better, she said, to spend money on the poor than on fine buildings. Miss Nutting and Miss Dock, from whose *History of Nursing* I have taken many of these details, give a very full account of these early hospitals, in Italy and the Orient, that were attended by Roman matrons.

After reading the account of these hospital developments and the story of the care for the ailing poor in the history of the time, it is easy to understand that Julian the Apostate, when he tried to restore the old Olympic religion, wrote to Arsacius, high priest of Galatia, directing him to build a hospital in his city to be supported out of public revenues. He wished, as he said, to rival the good work of the Christians who cared for the pagans as well as their own and were thus winning the hearts of the people. Every phase of need for the ailing poor was provided for in Basil's hospitals. Basil's example of Christian charity, social service, and prevention as well as the healing of disease proved contagious. Hospitals containing features similar to his were founded at Alexandria, at Ephesus and at Constantinople. Saint John Chrysostom built one in the fourth century and others followed shortly. Saint Pulcheria, sister of Theodosius II, founded a number of hospitals and refuges for the poor. Early in the sixth century Sampson founded a hospital near

the Church of Saint Sophia. Justinian built other hospitals, Du Cange (*Historia Byzantina*, II, "Constantinopolis Christiana.") enumerates no less than thirty-five hospitals in the eastern imperial capital.

The development of the hospital movement throughout Christianity in the Middle Ages is very well illustrated by the story of hospital foundations in the distant west of Europe - in England. Miss Clay in her volume on *The Medieval Hospitals in England* says:

> It will surprise many to learn that - apart from actual monasteries and priories, there existed upwards of 750 of such charitable institutions in medieval England. To appreciate the relative magnitude of this number it must be remembered that the total population was smaller than that of London at the present day. The fact proves the clergy and laity were battling bravely with social problems.

Miss Clay has given details with regard to a great many of these English medieval hospitals and has shown how important some of them were, though many of them were but small foundations. She has brought out very well how much private benevolence did in organizing for the care of the ailing poor, always turning to the Church and the religious for the carrying out of their good wishes while the benefactors were still alive and particularly after their death. There were many men like Dick Whittington of cat fame, "the model merchant of the Middle Ages," who were liberal benefactors of the hospital work of their time.

A great new impetus for the building and organization of hospitals came with the Crusaders. The beginning of this movement developed, however, before the Crusades. Shortly before the year 1000, the feeling developed in many minds that the millennium might mark the end of the world. As a consequence a wave of religious fervor spread over Europe, and thousands of Christians made pilgrimages to the Holy Land. These pilgrimages continued during the following century. Jerusalem was then in the possession of the Moslems, and a great many of these pilgrims suffered severely. Some of them were robbed by bandits, some were injured

in accidents by the way, others fell ill, many of them died. Some of the pilgrims, wealthier than others, bethought them to organize hospitals for the care of the ailing and destitute, and about the middle of the eleventh century rich merchants of Amalfi established at Jerusalem two hospitals, one under the patronage of Saint John the Almoner and the other under that of Saint Mary Magdalen. One of these was for men and the other for women. No distinction of sect was made, however, and ailing Mussulmans were cared for as well as the footsore Christian pilgrims and the ailing palmers who so much needed care.

There gradually came into existence two nursing orders which developed into the Knights Hospitalers of Saint John of Jerusalem and the nursing order of Saint Mary Magdalen which came after a time to be known as the female branch of the order of Saint John of Jerusalem. When the Crusades broke out, they were ready to take up the great task of caring for the injured and ailing crusaders. The male nursing order found after a time that often, in the midst of their work of caring for the wounded on the battlefield, they were attacked by the Mussulman enemy, and so they organized a fighting branch of the order for their protection. After a time this fighting branch, the Knights Hospitalers, became even fore important than the nursing branch, but always the duty of nursing continued to be an obligation on the order.

The nursing sisters came to be very well known, and the great heart of Europe went out to them in their work. Very soon they were given valuable endowments for their work in the shape of properties in many parts of Europe, the title to which was handed over to them and the rentals for which were regularly sent them. After the Crusades when they were dispersed over Europe, they continued to take care of the sick and injured, and besides that they devoted themselves to the care of the needy in times of social emergencies - as after earthquakes or fires or during epidemics. The Teutonic Knights, who from the first had both nursing and military duties and were mainly occupied in the crusade against the pagan Teutons in eastern Germany, came into existence later. Their importance can be best appreciated from the fact that one of the grand masters of the Teutonic Knights, a traitor to his trust, was the ancestor of the house of Hohenzollern, the recent kings of Prussia.

The great stimulus to hospital building came, however, in the thirteenth century. Pope Innocent III summoned Guy or Guido of Montpellier (France), who was said to have organized the best-conducted hospital of the time in his home city, to Rome to build a model hospital there. This was just about the beginning of the thirteenth century. That hospital - which with many restorations continued to function as a hospital until some ten years ago - was the old Santo Spirito in the Borgo not far from the Vatican. When bishops from all over the Christian world came at regular intervals for their visit *ad limina* to the Holy See, Pope Innocent called their special attention to this hospital and suggested that they should have one organized as far as possible like it in their dioceses. The result was a great outburst of hospital building everywhere throughout Europe. Many hospitals were built in Italy itself, but also in France and Spain and in Germany and England. Virchow, the great German pathologist who was also deeply interested in the history of hospitals and of medicine, was enthusiastic in his admiration of Pope Innocent III for what he had accomplished by this means. Virchow said that there was scarcely a town of 5000 inhabitants in Germany that did not have its hospital as the result of the stimulus afforded by the Pope.

He said:

> It must be recognized and admitted that it was reserved for the Roman Catholic Church and above all for Innocent III not only to open the bourse of Christian charity and mercy in all its fullness but also to guide the life-giving stream into every branch of human life in an ordered manner. For this reason alone the interest in this man and in this time will never die out.

Virchow's further tribute to Pope Innocent which is to be found in the second volume of his collection of essays, *Public Medicine and the History of Epidemics* gives the key to the spread of the hospital movement throughout Europe at this time.

> The beginning of the history of all of these German hospitals is connected with the name of that Pope who made the boldest and farthest-reaching

> attempt to gather the sum of human interests into the organization of the Catholic Church. The hospitals of the Holy Ghost were one of the many means by which Innocent III thought to hold humanity to the Holy See. And surely it was one of the most effective. Was it not calculated to create the most profound impression to see how the mighty Pope, who humbled emperors and deposed kings, who was the unrelenting adversary of the Albigenses, turned his eyes sympathetically upon the poor and sick, sought the helpless and the neglected upon the streets, and saved the illegitimate children from death in the waters! There is something at once conciliating and fascinating in the fact, that at the very time when the fourth crusade was inaugurated through his influence, the thought of founding a great organization of an essentially humane character, which was eventually to extend throughout all Christendom, was also taking form in his soul; and that in the same year (1204) in which the new Latin Empire was founded in Constantinople, the newly erected hospital of the Holy Spirit, by the old bridge on the other side of the Tiber, was blessed and dedicated as the future centre of this organization.

These hospitals were usually staffed so far as nursing was concerned by members of the Order of the Holy Ghost, men and women. The men took charge of the male wards, the women of the female wards. These hospitals of the Holy Ghost were famous for the order and cleanliness preserved in them. Many of the buildings erected for them were very beautiful, mainly because it was the custom of that time to consider that public buildings should be architectural monuments. The thirteenth century was the day of the great Gothic cathedrals and of the wonderful town halls and guild halls as well as chapter houses and monastery buildings. Some of the hospitals erected in the thirteenth century were more beautiful than any that were built afterward until the twentieth century came with its great new hospital movement which has multiplied the number of our

hospitals here in America fifty times in scarcely more than as many years. Our movement has been entirely secular mainly under the influence of the medical profession who were awakened to the necessity for clean new hospital buildings if they were to be enabled to do the aseptic surgery which has meant so much for the saving of human life and suffering since Lister's time. The old hospital movement was entirely ecclesiastical, and yet seven centuries after it stands comparison with ours.

Many of the hospitals were built by private beneficence, and some of the great noble families considered it a privilege to have their names associated with the foundation of hospitals. Virchow has dwelt especially on the many German hospitals erected by the families of which Elizabeth of Hungary was but one of the many ornaments because of their devotion to what we call social service. King Louis of France, as might have been expected from his kindly spirit of thoughtfulness for others, encouraged the building of hospitals in his dominions. This is one of the reasons why the name of saint is attached to his appellation as king of France. His sister Marguerite of Bourgogne built a model hospital of its kind, the picture and description of which are to be found in Viollet le Duc's well-known *Encyclopedia of Architecture*. A copy of this, a picture of a hospital ward of the thirteenth century, may be seen in my volume, *The Thirteenth Greatest of Centuries*. Mr. Arthur Dillon, a New York architect, describing this hospital that was built by Marguerite of Bourgogne says of it: "It was an admirable hospital in every way, and it is doubtful if we today surpass it."

Certain special hospitals deserve mention. A scourge of hospitals in the older times and indeed down almost to our own day was erysipelas. When it attacked surgical patients, it was nearly always fatal. In the latter Middle Ages special hospitals were founded for erysipelas, or "Saint Anthony's fire" as it was called, and by thus segregating these patients prevented infection and saved many lives and much suffering.

Hospitals continued to progress until the religious revolt in the sixteenth century. Luther, on a visit to Italy before his apostasy from the Church, praises the Roman hospitals and above all the fact that women of the better classes made it a rule to visit them at

regular intervals and devote themselves to hospital work of various kinds. The confiscation of the old Catholic foundations at the time of the Reformation, so called, ruined a great many hospitals. The new doctrine of salvation by faith alone without good works took away much of the incentive to beneficence. Even Luther confessed more than once that under the papacy generous provision had been made for all classes of suffering, while among his own followers no one was interested in the maintenance of the sick and the poor.

The story of Saint Camillus de Lellis illustrates the vitality of the Church during the century of the Reformation. While the reformers were spreading the doctrine of salvation by faith alone and the uselessness of good works in religion, this converted gambler who had been many years a soldier became the founder of an association of male nurses, priests and brothers wearing as the distinctive badge of their vocation the red cross for the first time in history (1586). At first they visited the hospitals and made the lot of the patients easier by distributing many delicacies to them and above all bringing them consolation, carrying messages to friends, and the like. Then they realized the necessity for taking care of the poor in their homes and became real servants of the sick. After a time they took charge of hospitals and accomplished an immense amount of good. They were founded in Rome in 1585, and a branch house was established in Naples in 1588. Other houses followed in Florence, Bologna, Ferrara, Messina, Palermo, Nola - not to mention less important places. They were asked to take charge of the Ospedale Maggiore in Genoa, one of the most important hospitals in Italy. Such small places as Bacchianico, the native town of Camillus, as well as other of the smaller cities of Italy received branches of the new nursing order.

By the time of Camillus's death (1614), less than thirty years after the original foundation, there were many hundreds of members of the order doing excellent work. In most places they organized an auxiliary among the people which was intended, however, not alone for the collection of funds but also for real personal service for the ailing poor under the direction of the religious. Many of the best people took on themselves the obligation of visiting the sick in the hospitals and alleviating their condition in every way. "This practice has been continued in Italy ever since, and the all-

important reason why Italian hospitals did not degenerate to anything like the same degree that is true in the English-speaking countries was that the visits of the well-to-do kept the hospitals to much better regard for the welfare of their patients.

The Servants of the Sick were of particular service in times of epidemics and these were ever so much more frequent three hundred years ago and when catastrophes of one kind or another - floods, earthquakes, fires - required special skilled care for the sufferers from them. They also went as war nurses with the army and anticipated, in Italy, the work which the International Red Cross has been doing for the world during the past two generations since its foundation.

The Eradication of Leprosy

The greatest triumph both for scientific medicine itself and for the health of the people during the Middle Ages was the eradication of leprosy - which in the course of time had become an epidemic folk disease - by the method of isolation practiced with the approval and by the instigation of the Church authorities. As Professor Sudhoff, the greatest of living historians of medicine, declared in his *Essays in the History of Medicine*:

> The leaders of the Church derived from the instructions given to the Jewish priesthood of the old dispensation, the impulse and even the obligation to carry out similar procedures. . . . As a result, the idea of contagion now gradually became the motive power in the development of an entire system of preventive measures, at first limited to lepers and persons suspected of leprosy.

After a time, however, the idea of prevention of the spread of disease by segregation came to be accepted for other affections besides leprosy, and this meant much in limiting the diffusion of contagious disease, especially in the crowded quarters of the cities of the Middle Ages. But the story of this is reserved for the following chapter.

It is often said that leprosy spread throughout Europe after the Crusades. Long before this, indeed in the very early Middle Ages, leprosy had begun to be diffused along the littoral of the Mediterranean, and the shore regions of Spain and Gaul became infected with leprosy through coastwise traffic. Already in the sixth century, as Sudhoff points out, the disease had attained such frequency in the interior of southern Gaul that its suppression was of pressing moment. This led the Supreme Council of Lyons in 583 to react to the situation with an edict putting rigid limitations upon the free movement of lepers through the country. In the East, even before this, there had been recognition of the danger and institution of the measures for segregation necessary to prevent the spread of the disease. It was from the East that leprosy spread along the coast

regions of the Mediterranean first in the eastern part and later in the west, and it is but fair to recognize with Sudhoff that the measures which led to its eradication originated there also, the earliest impetus to their diffusion coming from Saint Basil and his great hospital at Caesarea.

The recognition of the presence of leprosy led to the gradual development of compulsory regulations to prevent the spread of the disease. The lepers, for instance, were not allowed to go barefoot on public highways, they could not touch any articles laid out for sale even with the gloves which they were required to wear - an anticipation of our modern surgical employment of gloves to prevent infection - and anything they touched must be bought and paid for. Some badge of warning had to be worn on their clothes so as to make people approaching them know that they were lepers. For persons approaching them unawares the leper had to make known his presence by blowing a horn or shaking a rattle which he was required by law to carry with him for that purpose. Whenever anyone addressed them they must stand facing the wind for contagion was supposed to spread not only by actual contact, mediate or immediate as we think now and as the word indicates, but was supposed also to be carried on the air from person to person and from place to place.

Even as regards attendance at church, strict segregation regulations were enforced. Whenever lepers were admitted to general religious services, as in a parish church, they had to enter by doors reserved particularly for them and they had to confine themselves to particularly designated places which isolated them. These portions allotted to the lepers were often separated from the body of the church by high partitions and sometimes permitted a view of the altar only through narrow slits. There are churches in England at which the lepers were expected to attend Mass, but they were required to remain outside of the church. There was only a small slit provided for vision of the altar and it was through this that they received Communion. So as to avoid even a slight chance of communicating their disease in the practice of their religion, in many of the leper houses there were special chapels and churches for them in the leper colonies which were usually situated down stream in relation to nearby inhabited localities.

Lepers were required to live in these institutions and to observe all due precautions that would prevent contact with people who were not suffering from the disease. All lepers were committed to these institutions. Neither nobility nor family ties nor wealth not political influence could dispense lepers from confinement to leper institutions once the disease had declared itself. There must have been an immense amount of hardship involved in this tearing away of people from their homes and friends; but there seemed no other way to secure the community from the danger which the spread of the disease involved, and so the regulations were enforced. The Church was the most prominent factor in the establishment of these leper segregation regulations and the consequent gradual elimination of the disease which took place.

The influence of the Church made the leper colonies, however, very different from what most people think them to have been. A leper colony in the Middle Ages was often a very interesting institution. Some distance outside of the town, down stream from it, a traveler would notice on a hillside a group of little houses with shade trees and fruit trees around them and greensward and flowers, a church in the midst of them, all of it presenting a picturesque and even beautiful scene. This would be the leper colony. Lepers were not absolutely confined to these, but when with permit they traveled out of them, they were required as we have seen to observe very rigid regulations as to contact with others. There was very definitely the "open-door system" which made existence very different from the prison-like immurement for life that most people assume to have been enforced on lepers.

Distinguished people, kings and queens and the higher nobility, archbishops, bishops and abbots, as well as men of high political status, who passed these leper colonies usually made presents to them so that the inmates might enjoy a special feast day at the expense of the passing traveler. Men like Louis IX of France made it a tule when passing to greet the lepers personally in spite of the dread of the disease which had developed as the result of the insistence on segregation. It was only to be expected that Saint Francis of Assisi would, as we hear of him, stop to greet the lepers, and this is true of a great many of the medieval saints. It is rather surprising to find how many of the important personages of the

time turned aside when they were on a journey to bring some consolation to the hearts of the lepers.

Usually these passers-by asked for the special prayers of the lepers and recommended intentions to them, that is asked them to pray that certain of the desires of the hearts of their benefactors should be fulfilled. There was an almost universal feeling among the people of the time that the prayers of the lepers, if they were patient under their affliction, were likely to find special favor before the throne of God. It was recalled that He had said, "Whom the Lord loveth, He chasteneth;" and as these poor mortals certainly were chastened, they must be for that reason particularly close to the Lord. Hence the confidence with which men and women came to apply for the prayers of the lepers and their persuasion that whatever they did for these poor victims of disease had an especial significance as charity.

The lepers themselves came to recognize this feeling of almost reverence for them and to appreciate: it properly so that after a time there developed in them a certain sense of having a special mission in life. They lost the feeling that they were abandoned by God and man and just had to live out a hard life until the end. This was very different from what most people in the modern time, who do not appreciate the real conditions, would be tempted to think. After a time many a leper began to feel that his suffering had given him a special place in the world as a sort of intermediary between God and His people. Their suffering brought them closer to the Lord and the hope was neat that their prayers were more acceptable to Him if their suffering was borne in patience.

In spite of the impression to the contrary that is almost inevitable as a result of these conditions, the lepers came to enjoy after a time a certain satisfaction and happiness in life. As a consequence of the impetus to resistive vitality given by this hopeful state of mind in the midst of favorable surroundings in the country air and with good feeling, not a few of the lepers came to improve in health to such an extent that after careful examination which showed that no signs of the disease were left, they were permitted to mingle with the general population once more. There is no doubt that many cases declared to be leprosy were not genuine leprosy but represented some of the other chronic skin diseases mistaken for

leprosy; but there was an immense amount of true leprosy, and the method of handling the disease worked out under the auspices of the medieval churchmen, stimulated as they were by the regulations of the Old Testament, led to its eradication.

As we know now, the cure of leprosy is not impossible and the disease has certain pathological relations to tuberculosis which makes it reasonably clear that fresh air and good food and a hopeful state of mind would do a great deal for milder cases. Leper inspections developed into a definite medical specialty so as to insure proper recognition of the actual conditions present in these cured cases. "The regular examination of all suspects or carriers," as Sudhoff says, "first at the hands of the superintendent of the leper colony, the 'masters' of these organizations, later by specially appointed physicians and surgeons, by the corporate association of physicians in cities and by the medical faculties," made a very definite accumulation of information with regard to the disease. This inspection having its origin in religious rites has this curious trait, that it started with the least easily transmissible of all chronic infections which thus became the chosen herald of the doctrine of contagion. After the conquest of leprosy men were ready to believe in the possibility of eradicating other diseases and proceeded to do it.

The Doctrine of Infection - Disease Prevention

The greatest contribution at once to medical science and to the health and happiness of mankind in the field of medicine was the elaboration of the doctrine of infection and of that of disease prevention by prophylactic measures. Churchmen beginning in the days of the Fathers of the Church took up the problem of the eradication of leprosy following the injunctions laid down in Leviticus, and as a result there came the recognition of contagion and the possibility of its prevention. This was an absolutely new idea in the history of medicine.

It seems very strange to us that the wise old Greeks usually so acute in observation did not discover the principle of infection and contagion, but they did not. Sudhoff, the German historian of medicine, so dependable in such generalizations, said in his *Essays in the History of Medicine*: "The fundamental idea of infection and a definite grasp of the prophylactic measures implicit in it, failed entirely to take root in classical antiquity." He adds that it was not until the fifth century of the Christian era that in the course of medical tradition we first encounter an explicit statement of the transmission of disease by contact (contact infection) and its restriction by isolation. He goes so far as to say quite emphatically that

> it was reserved for the actual Middle Ages to elaborate serious official measures against the spread of epidemics which were consciously and even dutifully derived from the leper ritual of the Jews with its fundamental concept of isolation. Long before this in the east the Book of Leviticus had already engendered a school of thought in this matter quite apart from Judaism. This came to fruition particularly among the Fathers of the Christian Church. In his ever memorable hospital city of Caesarea, Basil the Great materialized the centric idea of charitable sick nursing in the loftiest

manner, and even provided for and erected an isolation house or home for lepers.

The eradication of leprosy which has been treated in the preceding chapter demonstrates how thoroughly and successfully the Middle Ages applied the idea of disease prevention by definite regulation and restriction of contact. The entire system of legal restriction and quarantine, as we know it now, was brought forth in connection with these ideas as a result of the effort to overcome the epidemics of bubonic plague which ravaged Europe so mercilessly in the latter half of the fourteenth century. Even priests were placed under the obligation to notify the authorities as to every case of plague that became known to them in administering Extreme Unction to the dying. The most meticulous precautions were taken against the spread of disease. Letters brought in by post were fumigated. Gold money was disinfected, the bedding of plague patients was burned, domestic animals were placed under control because there was more than a suspicion aroused that they could under certain circumstances be the carriers of disease. Finally the cities were kept clean through the control of streets and water supplies.

This had all developed out of the state of mind which had come into existence in connection with the system of warding off the contagion of leprosy. As the result of this, people came to see allied conditions due to infection in a more intelligent and clear-eyed way and they were more ready to submit to regulations, and physicians were ever so much more convinced of the good that might be accomplished this way. In connection with this, as Sudhoff says, "In the thirteenth century so forward in science and knowledge the general concept of 'contagious diseases' became current." The definite organization of what we would call a crusade of information among the people for the prevention of disease took place and a set of mnemonic verses was elaborated so that people might carry the necessary information about with them easily and communicate it to others in a form under which it was likely to be remembered. In a time when reading was not common and printing had not yet been invented and when the writing out of such verses required a good deal of labor, the composition of them in a readily memorizable form solved the problem of the popular diffusion of information with regard to contagion and the prophylaxis of

disease.

By the beginning of the fourteenth century, no less than thirteen infectious diseases, from which people were to protect themselves and the carriers of which were to be avoided, found a place in these mnemonic verses. ‘These diseases as enumerated by Sudhoff were plague, the exanthematous fevers, that is the febrile conditions associated with eruptions of the skin, typhoid, typhus and scarlet fever, measles and the like, phthisis, anthrax, trachoma and gonorrheal conjunctivitis, scabies and erysipelas and manifestly a series of rather serious infections which passed under the name of that disease or were called "the fire of Saint Anthony" or other names suggested by the redness and fever and throbbing which accompany them.

The crusade of popular information, moreover, was complemented by the development and legal institution of practical sanitary regulation. Municipal authorities were required to put patients suffering from these diseases outside the city gates and keep them there for a definite time. "Thirty days were supposed to be enough at first but after a while forty days were required and as the ecclesiastical term for this period was a quarantine, this word was adopted into sanitary use and now we speak of quarantine not as a length of time but as segregation from others. This would seem to indicate how close the ecclesiastical authorities were to the development of quarantine practices and of the prophylaxis of disease generally. Above all, the civil authorities forbade those suffering from disease or who were intimately in contact with patients from having anything to do with traffic and articles of food and drink as well as other materials of intimate human association with the person that might be expected to carry the disease.

Sudhoff has emphasized particularly that this organization of prophylaxis against contagious disease, which had remained hidden from the Greeks, occurred during the Middle Ages which are so often spoken of contemptuously as regards their science of medicine. He said, "All this is the achievement of the gloomy Middle Ages' hitherto penalized as the period of 'medical scholasticism' though now with tardy justice recognized as having accomplished good work." He adds that, "in the matter of

recognition of cognition and prophylaxis by isolation, the most rigorous line was taken at the instance of physicians by the city authorities of northern Italy and southern France." At this time the popes were in residence at Avignon in southern France and many of the distinguished physicians of the time were among the papal physicians.

The doctrine of contagion and the possibility of prevention continued to exist in Italy to a much more definite degree than in other countries. Both in Italy and in Spain there were laws that recognized the contagiousness of tuberculosis, insisted on quarantine for the disease and required the destruction of everything with which patients had been in contact. Dr. Flick, in his *Development of our Knowledge of Tuberculosis*, says that as the result of the recognition of the contagiousness of disease there is a tradition that the Indians in that part of America colonized by the Spaniards remained free from tuberculosis for a much longer period than those who were in that part of the country colonized by England and France. He suggests that, so far as this was true, "it no doubt was due to interference with emigration of tuberculous people to America by the laws of Spain." Unfortunately after a time the doctrine of the non-contagiousness of consumption gained a foothold and the result was a great increase in the disease until in our own time more definite precautions with regard to its possible spread were taken.

The Renaissance and its intense preoccupation with Greek medicine undid not a little of the good work in the prevention of disease which the Middle Ages had accomplished. The feeling of scholars was that if the Greeks did not have it then it was not worth while paying any attention to it. Toward the end of the first half of the sixteenth century Fracastorius, the distinguished Italian physician of Verona, redeemed the Renaissance period in this regard by restating the theory of contagion. The popularization of Fracastorius' ideas, especially among the clergy, came as the result of Father Athanasius Kircher's book on the pest or bubonic plague which was written in Rome in the generation that witnessed Galileo's trial. Father Kircher thought that he had seen little animalcules or living things that produce disease. He had observed cases of plague in a nunnery where they had been very careful to prevent all communication

with the outside world. He attributed the spread of the disease inside the walls of the nunnery to the visits of a cat and thus revived the idea of intermediate carriers of disease which had been the subject of so much solicitude during the Middle Ages. The medieval achievement in the recognition of infection and the practice of disease prevention is one of the great triumphs in medicine.

Monastic Medicine, The Tradition of Anesthesia, Medical Teaching

With the fall of the Roman empire and the further invasion of the Roman world by the barbarians, culture and civilization to a very great extent disappeared and only what the monasteries preserved of the intellectual life remained. The monks were more interested in religion that in medicine, but the copyists in the monasteries saved many of the medical classics from disappearing. Besides, the charity of Christ urged them to the care of the ailing, and this led them to the preservation of precious medical traditions. The monasteries were houses of call for travelers, and as a result inevitably had to assume the care of ailing travelers who contracted or developed disease on their journey. Besides, most of the monasteries had tenant farmers on their estates and the monks were interested in their health. Finally there was the infirmary in the monasteries for the ailing monks as well as in the convents for sick nuns; and infirmarians were provided with expert knowledge, as far as possible, to care for the ailing. These infirmarians gathered whatever medical knowledge they could obtain, making use of the monastic medical traditions to the best advantage.

The Rule of Benedict, founder of the monks of the West, said: "Before all things and above all things care must be taken of the sick." Benedict himself died of fever contracted while caring for the poor near Monte Cassino. An example of this kind on the part of their founder could not fail to be fruitful. The Benedictine monasteries became the repository of important traditions in medicine and surgery, and their scriptoriums or writing rooms preserved many of the old Greek medical writings from perishing from the face of the earth in the midst of the contemporary neglect of the intellectual life during the invasion of the barbarians in the early Middle Ages. Their gardens supplied the herbs which were considered to be so precious for the treatment of the various human ills even down to our own day. The beginnings of modern medical education can be traced mainly to monastic influence.

The relationship between medicine and the monasteries in the early

days is well illustrated also in the career of Cassiodorus. Early in life he attracted the attention of King Theodoric, of whom he became prime minister. After the death of the king, Cassiodorus at the age of fifty felt that he could do more good by his example in the religious life. A few years previously Benedict had founded the religious order, afterwards to be called the Benedictines, at Monte Cassino, and it was undoubtedly in imitation of Benedict's institution that Cassiodorus erected the monastery of Vivarium on his own estate. Here he lived to the ripe old age of ninety-three, spending almost as much of his life as a monk as he had spent in the world.

Cassiodorus himself drew up the rule of his monastery, and he emphasized the fact that monks should make researches and devote themselves to the increase of knowledge. He called attention particularly to the needs of the monastery in the matter of a knowledge of medicine on the part of its infirmarians, and he equipped the monastery library with a number of the best-known medical books of the Greeks. There is a definite tradition that he made it an obligation upon the infirmarians who had charge of the sick in the monasteries to consult the works of Hippocrates and Galen and to be guided. by them in their care of the ailing.

Herbal or Galenical medicine as it is called, after Galen the great Greek physician of Marcus Aurelius at Rome, owes the preservation of the traditions of therapy and the supply of the ingredients for the practice of it to the monasteries." Shakespeare's picture of the monk in medicine is not a poetic fancy but a portrayal of the realities of history. Friar Lawrence in Romeo and Juliet represents a survival of the tradition that monastery gardens were the usual source of plants and simples of various kinds that would be beneficial for ailing mankind. Friar Lawrence himself in the play suggests that he knew not only the qualities of plants but also of minerals. He was a true Galenist.

> Oh micle is the powerful grace that lies
> In herbs, plants, stones and their true qualities:
> For naught so vile but on the earth doth live,
> But to the earth some special good doth give.

It is the friar who proposes to Juliet "the brave and wise stratagem"

of taking the potion which shall set her to sleep for a definite period until Romeo may come and take her from the tomb and bear her away with him to await a time when it may be possible for them to bring about a reconciliation between their two families. The fact that this tradition of anesthesia or narcosis continued to be passed on from generation to generation in the monasteries is now well recognized.

This tradition of the use of anesthesia for surgical purposes has now been traced back to Alexandria when the great medical school there made its magnificent contributions to medicine and surgery. The first definite mention of anesthesia in modern history is in the writings of Saint Hilary of Poitiers. The passage was written about 356. For those who think of anesthesia as a modern discovery it is astounding to read the straight-forward account, as Hilary presents it of how men could be brought under the influence of an anesthetic and have various rather serious operations, even the amputation of limbs, performed on them without suffering any pain. Here are Hilary's own words. They occur in the midst of a discussion of the psychology of sensations.

> When the body is pricked or pierced, it is the soul which pervades it that is conscious and suffers pain. For instance, a flesh wound is felt even to the bone while the fingers feel nothing when we cut the nails which protrude from flesh. And if through some disease a limb becomes withered, it loses the feeling of living flesh, it can be cut or burned, it feels no pain whatever, because the soul is no longer mingled with it. Also when through some grave necessity part of the body must be cut away, the soul can eb lulled to sleep by drugs, which overcome the pain, and produce in the mind a death-life forgetfulness of its power of sense. Then the limb can be cut off without pain. The flesh is dead to all feelings, and does not heed the deep thrust of the knife because the soul within is asleep.

Sudhoff, the German historian of medicine, has collected the references to the use of the *spongia somnifera*, sleep-bringing sponge,

in his Archives of the History of Medicine. They are all monastic in association. There is a very definite reference to it in the *Antidotarium Nicolii* which comes from Salerno. For a time it was thought that the idea originated there. Later a reference to the *spongia* was found in the Bamberger Antidorarium. This dates from the ninth century. Then a reference of the same kind was found in the *Cassineser Reaeptar*, that is the prescription book or collection of recipes for medical purposes in use at Monte Cassino, the great motherhouse of the Benedictines. Manifestly the sleep sponge had been known in the earlier half of the Middle Ages.

The practice of anesthesia for surgical purposes seems to have been part of the tradition of the Irish monks. Dr More Madden called attention to the fact that a Celtic *materia medica*, that is a work which describes the various drug materials use in medicine and surgery in the twelfth century, contains a reference to a compound containing mandrake and other materials to be used "before cuttings and punctures in order that there might not be pain with them." It said further, "By means of this it is possible for anyone to secure sleep by just smelling it."

In the note to the chapter "Ancient Irish Medicine" in my volume, *The World's Debt to the Irish*, there is this paragraph:

> In proof of the antiquity of the use of anaesthetics in the Irish monastic tradition, Dr. More Madden quoted a passage from Jocelyn's life of Kentigern or Saint Mungo, patron of Glasgow, a book written sometime between 1185 and 1199. This life which is edited from the unique manuscript in the British Museum (Cott. vat. c. viii) of the twelfth century, was written by the celebrated Jocelyn of Furness, the biographer of Saint Patrick, and is dedicated to another Jocelyn, bishop of Glasgow. That passage runs, "It is perfectly clear to us that many having taken the drink of oblivion which physicians called the *lethargion*, have as a result gone to sleep; incisions in their members and at times cauterizations even in their most vital parts or abrasions have occurred without their feeling them

> in the least. After they were awaked from their sleep they were entirely ignorant of the fact that anything had been done to them. In the original medieval Latin the passage runs: "*Constat nibilominus nobis multos, sumptu botu oblivionis quem physici letbargion vocant obdormire; et in membris incisionem, et aliquotiens adustionem et in vitalibuo, abrasionem perpessos, minime sensisse, et post somni excussionem, quae erga sese actiata fuerant ignorasse*."

Arthur Oehm, in the "Hemmeter Festschrift" number of *Medical Life* says that

> in the sixth century monasteries were notably founded by Irish and Scotch monks who had been better able to maintain and preserve the heritage of Greece in the arts and sciences than the continental institutions, being removed from the destructive turmoil of the continent. . . . We know from statements of Columban, from the correspondence of Boniface and especially from the works of the Venerable Bede that the monks of Ireland and England did not neglect matters pertaining to medicine and made use of this knowledge at the bedside . . . they gradually transplanted medical ideas (largely derived from their classical learning) all over the territory that they traversed.

Some of these monks came to have a great reputation for their skill in medicine.

A very interesting illustration of the Church's care for those in need and of the very intelligent efforts that were made to help them, anticipating measures that were supposed to be developed ever so much later in the world's history, is the account which the Venerable Bede gives of the teaching of the deaf by Saint John of Beverly. Up to this time it had usually been considered that people thus afflicted had but very slight intelligence. John of Beverly who had had a varied career, after his retirement from the archbishopric of York devoted himself to the teaching of these unfortunates. As a younger man he was a member of the community under Saint Hilda

of Whitby. Afterwards he was bishop of Hexham and then Archbishop of York. After resigning this see to his pupil, Wilfrid, John established a monastery at Inderawood, afterwards called Beverly, which became an extremely important educational center. It was in connection with this that his special efforts were extended to the deaf mutes.

One of these deaf mutes proved to have unusual intelligence so John devoted himself to enabling the young man to develop his mental ability. Venerable Bede, who was himself a pupil of John, tells that the saint taught his deaf and dumb pupil "to read the lips and to speak." The great English church historian was very much inclined to think that his success must be considered almost miraculous and that it was the merits of Saint John which brought to the young man the blessing of speech. People who read the story of Venerable Bede, before the day when we actually had the experience that the deal could not only be taught to read the lips but also to articulate for themselves, would surely have dismissed it as representing one of those curious tendencies to believe the impossible which was so characteristic of the Middle Ages, or else they would have set it down as one of the miracles that friends came to relate of saints in order to bring them into honor.

John of Beverly was a Benedictine and his work probably continued for some time among this brethren and then was lost sight of. He died sometime toward the end of the first quarter of the eighth century and we have no further record of attempts to teach the deaf and dumb until the sixteenth century in Spain when a Father Pedro Ponce de Leon, also a Benedictine, taught many deaf pupils. It had become the custom to think once more that these poor afflicted ones were "dummies" not only physically but mentally, but Father de Leon whose charity was inexhaustible found that all that was needed was time and patient teaching to bring out their intelligence.

The beginning of medical education in modern history came with the foundation of the medical school at Salerno, a city in southern Italy some thirty miles away from Naples. There is some question as to how far the Benedictine school at Salerno was an important factor in the establishment of the medical school there. The

Benedictine school, a foundation from Monte Cassino not far away, can be traced back to the ninth century. There is no doubt that a rather close relationship existed between this school and the professors of medicine. The greatest figure in the medical school at Salerno was Constantine Africanus who brought back with him from his travels in the orient an immense amount of information with regard to medicine. He had collected also a large number of manuscripts. Constantine became the intimate friend of Abbot Desiderius of Monte Cassino. This friendship developed while Desiderius as a simple monk was teaching in the Benedictine school of Salerno. When Desiderius was elected the abbot of Monte Cassino, Constantine became a monk at Monte Cassino and continued his great work of providing foundation stones for modern medicine. The medical school at Salerno became the great medium for the diffusion of the medical writings which Constantine in the peace of Monte Cassino was engaged so sedulously in giving to the world of his time.

Professor Sudhoff declares that the influence which Constantine Africanus exerted at Salerno was profound. His personal relations to the Salernitan school were transient but his medical publications were of great importance. Those most certainly written by him found a willing and almost eager reception and application in practice. He became the exponent of an extensive new endogenous literature. Constantine's works represented the beginning of modern medicine. Much of what he wrote was adopted and adapted from the Arabic medical writers; but there was no little jealousy between Christians and Arabs, and the result had been a neglect of Arabic medicine which because of the intimate contact of the Arabs in Asia Minor with the old Greek medical sources was very valuable. When published by Constantine under his own name and with the prestige afforded by his brotherhood in the order of the Benedictines of Monte Cassino, these works attracted attention and meant very much for the beginning of the development of European medicine.

After Constantine one of the greatest figures at Salerno was Alphanus, usually designated "the first" because there are several of that name. He was a Benedictine monk, known by his contemporaries as both poet and physician, who was afterwards raised to the bishopric of Salerno. "This succession of events

illustrates very clearly how intimate the relations of the Benedictines and the pioneer medical school at Salerno continued to be for centuries, for Alphanus lived in the twelfth century.

As the latter half of the Middle Ages began, there is evidence for the important place of the Benedictines in medicine because of the works of an abbess of a Benedictine nunnery which have attracted much attention in recent years. She is now proclaimed to have been the most important writer on scientific and medical subjects in the twelfth century. She is known in history as Saint Hildegarde, and was the abbess of Disibodenberg - not far from Bingen on the Rhine. Some most surprising hints of medical knowledge are to be found in her works. She seems to have had some inkling of the circulation of the blood and, surprisingly enough, she wrote about problems of heredity and certain sex subjects that might have been expected to be outside of her sphere of attention. When we recall, however, that in the preceding century a Benedictine nun Hroswitha of Gandersheim wrote the first comedies of modern time with the declaration that they were written to supersede the reading of Terence, objectionable because of sex elements in his plays, it is easy to understand Hildegarde's writing on these subjects.

Some of the expressions of modern commentators with regard to Hildegarde's writing reveal their appreciation of her work. Melanie Lepinska in her Paris thesis on Hildegarde just at the beginning of the twentieth century, suggests that

> Hildegarde foretold auto-infections and seemed almost to foretell or to comprehend the circulation of the blood, she recognized the brain as the regulator of all the vital processes and as the centre of life, understood the influence of the nervous system and the spinal cord on the process of development. . . . In short a profound intellect reflecting on all subjects with the intuition of genius full of experience, embracing the whole science of her time so does she appear in her first medical work.

Hildegarde is of interest particularly because she represents the culmination of the traditions of medical lore and of hospital care for

the ailing in the Benedictine nunneries. Much is due to her own genius but undoubtedly, also, much is due to her knowledge of what had gone before and to the accumulation of information which the nuns had secured in their work down the centuries since their foundation.

A recent tribute to Saint Hildegarde is the article on "The Scientific Views and Visions of Saint Hildegarde," by Dr. Charles Singer, which is the leading article in the volume, *Studies in the History and Method of Science*. This is really a monograph on the subject for it contains nearly sixty pages of a quarto volume. Dr. Singer thus speaks of her work:

> Hildegarde was a woman of extraordinarily active and independent mind. She was not only gifted with a thoroughly efficient intellect but was possessed of great energy and considerable literary power and her writings cover a wide range betraying the most varied activities and remarkable imaginative faculties.

What she knew about science is contained in two volumes bearing the names *Liber simplicis medicinae* and *Liber compositae medicinae*. Most of what Hildegarde wrote comes to us in a single copy, of none is there more than four copies, showing how near we came to missing all knowledge of her entirely. Undoubtedly there were many other writings, and some of them on medical subjects, by these nuns as well as the monks of the Middle Ages, but these disappeared with the vicissitudes of time. The reformation, so-called, worked sad havoc with monastic libraries. Some of them contained the most precious materials for the understanding of medieval life and knowledge. They were destroyed partly through neglect but mainly through contempt for medieval scholars and their work.

The Care of the Insane

There has been more misunderstanding, in the modern time, of the relations of the Church to healing because of ignorance of the stand taken by medieval ecclesiastics toward insanity and the insane than for any other reasons. It is usually said that until modern times insanity was thought to be due to possession by an evil spirit, and therefore the only way to treat the insane was by exorcising these spirits. It is presumed by many that the position taken by the Church in this important matter discouraged physicians from studying mental disease and led to an utter failure of anything like proper care for these poor patients who were, as we understand so well now, sufferers from disease just as much as those who had bodily ills of various kinds.

The idea, however, that there was a very general acceptance of the notion that insanity was practically always caused by possession by evil spirits is entirely without substantiation in what we have come to know of the history of the Middle Ages. That idea is very largely due to the presumption with regard to spirit possession that grew up during the witchcraft delusion. It must not be forgotten, however, that the witchcraft delusion is not medieval but modern in its date and was at its height during the seventeenth century.

There is only one way that the attitude of the Church and churchmen toward the insane in the Middle Ages can be determined and that is through the formal teaching of theologians and those who wrote books touching the subject that were approved by the ecclesiastical authorities of the time. These furnish a very different impression from anything like the belief in insanity as due to the possession of evil spirits.

We have one very striking testimony in this matter and that comes from the compendium of information compiled by Bartholomew the Englishman (Bartholomaeus Anglicus) for the use of priests. There are a great many practical questions on which priests ought to be well informed, and these Bartholomew, who was a learned Franciscan friar, gathered into a single volume of encyclopedic character so that answers might be readily available for any one

seeking information. His book was very much read and continued to be used as a manual of information for some four centuries. It exists in a large number of manuscript copies which would indicate that Bartholomew was one of the most widely read of the serious authors of the Middle Ages. Even before the invention of printing the book had been translated into half a dozen modern languages. It was originally written in Latin but the French translation made by an Augustinian, Jean Corbichon, is itself a literary monument in French and there are further translations into Italian, Spanish, English and Provengal.

After printing came in, Bartholomew's book, the title of which is *De proprietatibus rerum*, The Properties of Things, was published in a number of editions, no less than three times as an incunabulum - that is before 1501 - and more than a dozen times afterwards. There was evidently great call for the book. It was meant particularly for priests, and was evidently used by all the clerics - that is, by practically all those who could read at that time.

What Bartholomew has to say with regard to insanity represents the opinion of the churchmen of his time better than could be obtained from any other source. His work was actually used as a textbook in the schools of theology and may be quoted confidently as constituting the source of knowledge on all these dubious questions. Bartholomew condensed what he had to say with regard to the causes, the symptoms and treatment of insanity into a single brief paragraph.

Bartholomew knows all the causes of insanity and mentions them. They are passion, overwork, over-thought, sorrow, too deep study and fear. These are the mental causes. But he knows also that there are physical factors that bring about disturbance of mentality. Insanity may come as the result of an infection, from the bite of a mad dog or some other venomous animal. Bartholomew was aware, moreover, that insanity may come from overeating as well as from the overdrinking of strong wine. He warns that not all the patients suffer in the same way, and he describes the two principal forms of mania or excitement and melancholia or depression. These two continued to be the center of attention until the end of the nineteenth century. Bartholomew warns of the possibility of the

insane hurting themselves or others. For this reason they must be restrained. As for their treatment, there must be such change of environment as will renew their health and strength and they must be withdrawn from business and from the source of their dreads and whatever else may be disturbing. Finally music must be provided for their entertainment and occupation secured for them. A change of environment, entertainment, occupation, these are the very latest developments in our care of the insane.

Here is Bartholomew's paragraph from the translation by Berthelet made nearly four hundred years ago but with the spelling modified so as to make it easier to understand at the present time.

> Madness cometh sometime of passions of the soul, as of business and of great thoughts, of sorrow and of too great study, and of dread: sometime of the biting of a wood (mad) hound, or some other venomous beast; sometime of melancholy meats, and sometime of drink of strong wine. And as the causes be diverse, the tokens and signs be diverse. For some cry and leap and hurt and wound themselves and other men, and darken and hide themselves in privy and secret places. The medicine of them is, that they be bound, that they hurt not themselves and other men. And namely, such shall be refreshed, and comforted, and withdrawn from cause and matter of dread and busy thoughts. And they must be gladded with instruments of music, and some deal be occupied.

This paragraph of instruction for priests with regard to insanity is one of the best brief formulas on the subject that we have. I doubt whether any one could do better at the present time than was actually accomplished by this medieval friar who wrote sometime about 1240. His influence, more than that of any other, continued to be felt on the subject until long after the Reformation. Unfortunately the development of the witchcraft delusion and the decadence of hospitals after the Reformation brought about the serious neglect of the insane and popularized the idea of possession by evil spirits. The Catholic countries were ever so much less

affected by the witchcraft delusion than the reformed countries, and the deterioration of hospitals was not nearly so marked in them. In Italy and in Spain the hospitals for the care of the insane continued to be maintained under much better conditions than those in the countries which had been disturbed by Luther's movement.

The medieval monasteries undoubtedly were often an asylum for the feeble-minded and for the milder insane, as well as for the simple-minded who get along very well if they are only allowed to work quietly and peacefully, and if people do not try to impose on them. The children of the nobility who were not quite tight in mind were cared for by the monks, but the monastery afforded provision for the others for charity's sake and gave them an opportunity to work and be occupied and thus secure the only happiness possible for them. We have come to realize in our time that the farm system of caring for such people is best for them in every way, especially if they can be given the opportunity to do regular work under conditions that are not too hard. Even at the present time there are a good many monasteries and nunneries where there are two or three or more simple-minded persons who found it extremely difficult to get along with ordinary employers and yet find it easy to get along with the Sisters, and who work faithfully for years and are about as happy as people can be. There were no institutions for these people in the older times, and the monasteries supplied the place of them and accomplished what we are only just beginning to do again by means of our colony and village systems of caring for the milder insane.

Special care for the insane was provided at first in the general hospitals in connection with other ailing people. This may seem an unfavorable condition, but manifestly special arrangements were made for them; and what alienists desire at the present time is that special wards should be set aside in the general hospitals for the care of the insane, so that they may be under observation early in their cases. As it is, even at the present time, the stigma supposed to attach to insanity, for which there is no good reason, often keeps people from sending patients to the asylum until there are already outspoken symptoms of insanity. If sent earlier many of these cases might be saved from the further development of their affection and placed in conditions under which improvement rather than

deterioration would take place.

After a time special hospitals or asylums for the insane were organized. Bethlehem hospital in London in the thirteenth century, after having been a general hospital, came to be used exclusively for the insane. As a result the word Bethlehem, in the speech of the Londoners softened into Bedlam, came to have the special significance of anything related to insanity. The insane people were known as Bedlamers or Bedlamites and still later as "Bedlam beggars," though attached to this expression there is a very interesting social and medical development that must be touched upon because it tells the story of one phase of arrangements for the care of the insane.

In the later Middle Ages the insane were not yet rigorously confined; but if they had shown any improvement and their delusions were over and they had become capable to some extent at least of caring for themselves, they were allowed to leave the hospital for a time. "There was a condition, however, that they should wear a badge indicating that they had been for a time under surveillance at Bedlam. It might seem to modern ideas to be a hardship thus to expose them to public recognition but it worked to their advantage. All those who came in contact with them took pity on the poor fellows who had been in the asylum and gave them charity, but above all were careful not to irritate them nor to impose on them. In other words, the Bedlamers were committed to the care of the general public at the time when feeling for the fellow man ran high and they fared very well.

This fact was noted by the "sturdy vagrants" (*validi vagrantes*) of all kinds who tried to secure one of these Bedlam badges because possession of it gave them a chance for an easy life. Such abuses of charity are very well known and never more so than in our own time. On the death of possessors of Bedlam badges others who had no right to wear them proceeded to make use of them. Occasionally they stole them from rightful owners. The state of affairs which developed can be understood best from Shakespeare's presentation of a counterfeit Bedlamer, in the person of Gloucester's legitimate son, in *King Lear*.

In all this story of care for the insane in the Middle Ages there was

no question of possession by the evil spirits - nor was there in the first phase of development of care for the insane which occurred in the little town of Gheel in Belgium. Saint Dympna, an Irish girl, who had come over with the missionaries from Ireland and who in her lifetime had been very much interested in the insane and feeble-minded children, was martyred in Belgium. After her death feeble-minded children and mild young insane patients were brought to her shrine in the hope of relief or cure through her intercession. The friends of the patients did not expect immediate cure so they left them to be cared for in the families of the villagers near the shrine. This practice has continued for more than a thousand years and has been eminently successful. Mrs. Vernon Kellogg, the wife of the United States Food Commissioner in Belgium during the war, described* her personal experiences in Gheel and brought out the fact that very probably this is the ideal system for caring for such patients.

What we find, then, in the history of care for the insane under Christianity is very different from the common impression with regard to it. First there is the colony system or village method of caring for the insane which developed at Gheel and is now looked upon as probably the best way to care for these patients. Secondly there is the open-door system of caring for the insane with provision for committing the insane when they are out of the asylum to the special care of the public. The place that the idea of spirit possession takes as the cause of insanity or exorcism in its treatment is of very minor importance. Bartholomew's succinct paragraph shows how thoroughly insanity was understood.

The great abuses in the care of the insane which had to be corrected during the nineteenth century and some of which are in existence at the present time developed in connection with the deterioration of hospitals after the Reformation. Both Spain and Italy maintained much better institutions for the care of the insane than the other countries of Europe. The use of chains and manacles for the control of the insane is not a medieval but a modern abuse. When the reform of insane asylums was taken up seriously, the Sisters' institutions were particularly valuable in introducing high standards of gentleness and sympathy in the care for these poor unfortunates. The most serious conditions prevailed in the state institutions and

particularly in the county poorhouses in various parts of the world where the insane and the paupers were under the same roof. Even yet many of these institutions are a disgrace to modern civilization.

The Church and Surgery

One of the greatest surprises in the development of documentary history in our generation was the discovery that there had been a magnificent evolution of surgery during the twelfth and thirteenth centuries in Italy, beginning with the great medical school at Salerno but spreading all over the Italian peninsula and making its way into France and England. For this chapter in history we are not dependent on vague traditions but fortunately are in possession of the actual textbooks of the professors who taught surgery in the Italian and French universities of the time. The preservation of them before printing through the laborious process of hand copying is a tribute to the thoroughgoing appreciation of the generations that copied them so faithfully, and fortunately most of them were printed among the incunabula (before 1501) and made safe from the vicissitudes of time.

These textbooks are a revelation. It was astounding to find that surgeons at the end of the Middle Ages, supposed to be so lacking in this department, had actually been doing much better surgery than the surgeons of the nineteenth century ventured upon until a decade or two, at least, after Lister came to revolutionize modern surgery.

This was all the more surprising because a special historical tradition had been created in the English-speaking countries that the practice of surgery was forbidden by the Church in order to encourage the use of prayer and Masses and relics and the visitation of shrines from which the Church would derive more revenue. Professor Andrew D. White, in his work, *The Warfare of Science with Theology*, declared that, invoking as a guiding principle, *ecclesia abhorret a sanguine* ("the Church abhors the shedding of blood"), ecclesiastics prevented the development of surgery. He adds:

> So deeply was the idea rooted in the mind of the universal Church that for over a thousand years surgery was considered dishonorable. The greatest monarchs were often unable to secure an ordinary surgical operation and it was only in 1406 that a

> better beginning was made when the Emperor Wentzel of Germany ordered that dishonor should no longer attach to the surgical profession.

The situation thus conjured up enables him to emphasize ecclesiastical hypocrisy by the suggestion that the Church was not chary of shedding blood in other ways.

As a matter of fact during the two centuries and a half immediately preceding this date given by President White there was a marvelous development of surgery. The outstanding surprise of medical history has been the discovery and revelation of this fact in the past generation. Pagel, the well-known German historian of medicine says, "A more favorable star shone during the whole Middle Ages over surgery than over practical medicine. . . . The stream of works on surgery flows richly during this period." Gurlt in his great history of surgery has a huge volume concerned almost entirely with surgeons who did their work during the very centuries when President White says there was no surgery. The historian of *The Warfare of Science with Theology* had evidently never looked into the history of surgery.

The beginning of the great development of surgery was at Salerno in the last quarter of the twelfth century. The first important textbook was written by Roger and then came his pupil Rolando who wrote a commentary on his master's work. This combined textbook was subsequently annotated by a group of South Italian surgeons known as the Four Masters. Gurlt himself, one of our most distinguished surgeons at the end of the nineteenth century who went back to the originals, declared that this textbook shows clearly that the writers drew their opinions from a rich experience. They were intent on observation rather than theory, and their textbook is a treasure house of valuable hints for the surgeons not only of their day but of all generations since. These surgeons from Salerno, for instance, knew the possibility of fracture of the skull by *contrecoup*. They say, "Quite frequently though the blow comes on the anterior part of the cranium fracture occurs on the opposite side." "They tell the story of a boy wounded in the head by a thrown stone apparently without serious result though he died the next day. "When his cranium was opened a large amount of black blood was

found coagulated beneath his dura mater." Since then many a boy has died, after being hit on the head by a missile, because his surgeon did not realize the possibility of rupture of the middle meningeal artery.

Professor Clifford Allbutt, Regius Professor of Medicine at Cambridge (England), in his *Historical Relations of Medicine and Surgery Down to the Sixteenth Century*, says of their method of caring for wounds:

> They washed the wound with wine scrupulously removing every foreign particle; then they brought the edges together, not allowing wine nor anything else to remain within - dry adhesive surfaces were their desire. Nature, they said, produces the means of union in a viscous exudation or natural balm. . . . In older wounds they did their best to obtain union by cleansing, desiccation and refreshing of the edges.

The experience of surgeons during the Great War brought them round to many of these old-fashioned ideas once more.

Theodoric comes nearest to us of all these old surgeons. He wrote in 1266:

> For it is not necessary as Roger and Roland (of Salerno) have written, as many of their disciples teach and as all *modern* surgeons profess, that pus should be generated in wounds. No error can be greater than this. Such a practice is indeed to hinder nature, prolong the disease and to prevent the conglutination and consolidation of the wounds.

And yet for five hundred years after his time "laudable pus" was the best that surgery could hope to secure after surgical intervention. Theodoric himself was a bishop and wrote his textbook on surgery mainly in order to preserve the teaching of his father, the famous Ugo of Lucca. He was very proud of the work that his father had done and he boasted of the "linear" cicatrices which he used to

secure without the use of any ointment. He impugned the use of poultices with oil on the wounds and declared that powders were too drying and besides they had a tendency to cake and thus prevent drainage. The literal meaning of the words which Theodoric uses *saniem incarcerare* is "to incarcerate sanious material. One is not surprised after that to find that Theodoric has many hints as to the practical treatment of surgical affections that are anticipations of developments of our time.

Theodoric was followed by William of Salicet who imitated Theodoric in getting away from the Arabic abuse of the cautery and brought the knife back again to its proper place as the ideal surgical instrument. Gurlt, in his history of surgery, devotes more than ten pages of rather fine print to William and his work, insisting that William depended much more upon his own experience than upon what was to be found in textbooks. He knew what had been written before his time, very well, but as a rule he did not quote from his predecessors unless he had tried the recommendations for himself or unless similar cases had come under his own observation.

The next of these great Italian surgeons masquerades under a French name because he was professor of surgery at Paris. This is Lanfranc whose family name however was Lanfranchi or Lanfranco and who is sometimes spoken of as Alanfrancus. He practiced as a physician and surgeon in Milan until banished from there by the Visconti about 1290. He removed to Lyons where he attracted so much attention that he was offered a professorship of surgery in Paris. Gurlt says he attracted almost an incredible number of scholars to Paris and by hundreds they accompanied him to the bedside of his patients and witnessed his operations.

Lanfranc completed his surgery called *Chirurgia Magna* in 1296 and dedicated it to Philippe Le Bel, the reigning French king. He thus described the character that a surgeon should possess:

> A surgeon should have a temperate disposition well under control. . . he should have well formed hands, long slender fingers, a strong body not inclined to tremble and with all his members trained to the capable fulfilment of the wishes of his mind. He should be of a deep intelligence and

> of a simple, modest, brave but not audacious disposition. He should be well grounded in natural science and should know not only medicine but every part of philosophy; he should know logic well so as to be able to understand what is written and should talk well so as to support what he has to say by good reasons.

Lanfranc clearly had a high ideal for his profession. He had some very practical hints for young surgeons. For instance, "The surgeon should not love difficult cases and should not allow himself to be tempted to undertake those that are desperate. He should help the poor as far as he can but he should not hesitate to ask for good fees from the rich."

The next of the great surgeons of this period was the successor of Lanfranc at Paris, Henri de Mondeville. Old writers usually quote him as Henricus. The first edition of his book ever printed we owe to Professor Pagel who published it at Berlin in 1892. Gurlt in his *History of Surgery* has given over forty pages, much of it being small type, with regard to Mondeville because of the special interest there is in his writing. This would represent a volume of good size because Gurlt's pages are large. He was a great teacher of surgery. Here is his idea of the training of a surgeon:

> A surgeon who wishes to operate regularly ought first for a long time to frequent places in which skilled surgeons operate frequently and he ought to pay careful attention to their operations and commit their technique to memory. Then he ought to associate himself with them in doing operations. A man cannot be a good surgeon unless he knows both the art and science of medicine and especially anatomy. The characteristics of a good surgeon are that he should be moderately bold, not given to disputation before those who do not know medicine, operate with foresight and wisdom, not beginning dangerous operations until he has provided himself with everything necessary for lessening the danger. . . . He must be highly moral,

> should care for the poor for God's sake, see that he is well paid by the rich, should comfort his patients by pleasant discourse and should always accede to their requests if these do not interfere with the cure of the disease.

He had been a student of Lanfranc as may be seen by these expressions, but he went much farther than his master and was evidently a great-souled member of his profession.

He emphasized very much the need of keeping the patient's mind in favorable condition.

> Let the surgeon take care to regulate the whole regimen of the patient's life for joy and happiness, by promising that he will soon be well, by allowing his relatives and special friends to cheer him and by having some one to tell him jokes. Let him be solaced also by music on the viol or psaltery. The surgeon must forbid anger, hatred and sadness in the patient and remind him that the body grows fat from joy and thin from sadness.

Mondeville has much to say with regard to the assistants who share with the surgeon his care of the patients. He feels that they often put obstacles and difficulties in the way of convalescents. He insists then that "the surgeon must be careful in the selection of nurses and attendants for some of them obey very well while he is present but do as they like and often just exactly the opposite of what he has directed when he is away." Just what the status of these attendants of whom Mondeville talks was at that time, we are not sure. There would seem to have been both men and women trained for the special purpose of caring for patients. Some of these were undoubtedly medical students, others were young physicians, but still others must have been what we would call nurses or orderlies.

There is scarcely a feature of modern surgery that Mondeville does not touch on in his writings. The picture of the surgeon of France at the end of the fourteenth century, as he gives it, affords a very interesting demonstration of how thoroughly surgery developed in the later Middle Ages. This rather detailed account is all the more

interesting when confronted with the impression that prevailed in many minds that the Church had so hampered the evolution of surgery that even monarchs found it difficult to have operations done on them. These surgeons of the thirteenth and fourteenth century were actually doing very much better surgery, as can be readily seen from their textbooks, than was being done anywhere in the world between 1800 and 1850.

Mondeville's personal attitude toward the Church is very well illustrated by his dedication of his textbook of surgery. He says in the preface, that he

> began to write it for the honor and praise of Christ Jesus and the Virgin Mary, of the saints and martyrs, Cosmas and Damien, and of King Philip of France as well as his four children and on the proposal and request of Master William of Brescia, distinguished professor in the science of medicine and formerly physician to Popes Boniface IV and Clement, the present pope.

There is good reason to think that most of these medieval surgeons who reached distinction were in Holy Orders. We know that Theodoric was a bishop and that William of Salicet was in minor orders, as probably also Lanfranc. Guy de Chauliac, the father of French surgery as he has been called, was the canon of a cathedral; and while this does not necessarily imply that he was in major orders, he was surely a cleric. Mondeville was very much disturbed, however, by the presumption of some priests in assuming direction of patients and giving them medical advice. He said that some of the clergy of his time seemed to think that a knowledge of medicine was infused into them with the sacrament of Holy Orders. He deprecated that idea very much.

(*President White in his The Warfare of Science with Theology quotes certain papal decrees forbidding surgery to monks as the reason for the failure of surgery to develop. In my volume on The Popes and Science (Fordham University Press, fourth edition, 1915) I quoted all the Church regulations with regard to the prohibition of medicine and surgery to monks. These same decrees also forbade the study of law. It was felt that it was unsuitable for members of religious orders to be*

occupied with such mundane affairs. The decrees themselves are worded in such a way as to make it very clear that their purpose is only the guidance of religious in the paths of the spiritual life. The amusing feature of the subject is that actually - at the very time when because of these decrees, as President White so confidently asserted, there was no surgery - there was a magnificent development of the subject, the wonder of the modern world when it was rediscovered. Manifestly this very development of profound interest in surgery tempted some of the religious to devote themselves to the subject and the resulting abuse led to the issuance of the Church decree. That they had no diriment effect on the development of surgery is very clear from the history of this specialty as we have it.)

Chauliac, the next of these great surgeons, was born in the south of France, but like all those who reached distinction at this time he was educated in Italy. He describes the many dissections that were made in Bologna where his master Bertruccio taught anatomy by dissection. This is the period when President White says there were no dissections because the Church was opposed to them. The great French surgeon's attitude toward anatomical knowledge by actual study of the cadaver can be judged from his well-known expression that "the surgeon, ignorant of anatomy, carves the human body like a blind man carving wood." After his Bologna experience Chauliac went to Paris where Lanfranc was developing the Italian surgical tradition on French soil and attracting "an incredible number of students to Paris." Lanfranc's successor was Mondeville, who was followed by Guy de Chauliac; and these three lifted French surgery up to a plane which according to Pagel, the German historian of medicine, enabled Frenchmen to maintain their position as the leading surgeons of the world until the nineteenth century.

Chauliac had a series of experiences at other places and then settled down in Lyons and achieved a great reputation. It was while here that he was summoned to become papal physician and he served in this capacity for three popes, Clement VI, Innocent VI and Urban V. It was in the leisure afforded him by this position that he wrote his Chirurgia Magna which, as he tells us, was undertaken as solatium senectutis, "a solace for his old age."

Many other surgeons in succeeding centuries reached distinction in

the universities founded under decrees of the popes. The careers of a number of them may be read in my volume on *Medieval Medicine*. With the decadence of hospitals surgery sank to an almost incredible degree until only minor surgery and surgical operations in the face of impending death continued to be done. Nothing is more surprising than this deterioration of surgery and yet it is easily explained. For good surgery three conditions are necessary - good hospitals, good nursing, good surgery. The Reformation brought decadence to the hospitals, suppressed the nurses, and the surgeons lost their skill under the impossible conditions that resulted. Modern surgery dates from Lister and the reform of hospitals fifty years ago.

The Papal Physicians

Very probably the most interesting feature of the relations of the Church and medicine is to be found in a brief account of the lives and medical careers of the men who were selected for the position of papal physicians. We have for the past seven centuries a nearly complete list of the men whom the popes chose as their personal medical attendants. They were as a rule members of the medical profession who had deservedly achieved fame in some way in connection with the development of medical science or medical practice. In the list is to be found some of the greatest discoverers in modern medicine. "There is no list of names connected by any bond in the history of medicine which contains so many investigators who have done successful original research in medicine as this of the papal physicians. There is, for instance, no faculty list even of the oldest medical schools in Europe which contains the names of so many men who did enduring work in medicine as these men who had been called sometimes from long distances to be given the responsibility of the health of the popes.

It is easy to understand that a man selected by a pope to be his personal physician gained prestige among his fellows that was very valuable. At the same time the selection of physicians of real scientific attainments to be the pope's personal medical attendants gave an incentive to reverence and respect for the medical profession that was worth much for the encouragement of proper regard for scientific medicine. At all times, and never more than in our own, there has been a tendency for people, not merely the ignorant but very often the well-informed and sometimes even those who seem to deserve the name of educated, to believe all sorts of curious and impossible things and accept all sorts of absurd ideas with regard to disease and its treatment. Not long before his death, Sir William Osler said, "In all things relating to disease, credulity remains a permanent factor, uninfluenced by civilization or education."

The good example set by the popes, by the selection of their medical attendants from among the workers who made distinct advances in medical science was of prime importance in stemming

the tide of superstition that is always likely to manifest itself in matters relating to diseases and their cure. There have always been all sorts of healing religions; and the Catholic Church itself proclaimed the curative value of prayers at shrines and the touch of relics and of various blessed objects, and yet the popes selected their personal physicians with due attention to their scientific attainments. Their maxim evidently was that attributed to Saint Ignatius of Loyola - do everything possible as if all depended on you and then leave it all to God as if everything depended on God. The list of these papal physicians who were at the same time distinguished medical scientists is of paramount interest in the history of the Church's relations to healing down the ages.

There are some hints of papal physicians before the thirteenth century; but naturally, in the vicissitudes of time, records of them have disappeared to a great extent. There is a very old manuscript in the Vatican library dedicated to Ursus, physician and domestic prelate to Pope Nicholas I, who was pope from 858 to 867. Pope Sylvester II (999-1003), the well-known Gerbert, was famous for his knowledge of medicine as well as of the sciences, and a close personal friend of men who did much for medical education in France. Pope Victor III, who had been before his election as pope Abbot Desiderius at the Benedictine monastery of Monte Cassino, was for years the intimate friend of Constantine Africanus, who did so much for the medical school of Salerno and then afterwards became a monk under Abbot Desiderius at Monte Cassino, but continued his great work of making Arabian medicine available for the students who flocked to Salerno by the translations that he made at the expense of so much labor and scholarship.

With Innocent III at the beginning of the thirteenth century the list of the papal physicians begins to be preserved somewhat better. Guy de Montpellier, summoned to Rome to organize the hospital of Santo Spirito by Innocent III (1198-1215), was very closely in the pope's confidence. As the result of his influence, similar hospitals of the Holy Ghost were founded throughout most of Europe until literally there were hundreds of them." Richard the Englishman, well known in the history of medicine, was a physician to Pope Gregory IX (1227-41), and another Englishman, Hugo Attratus or Attractus, said to have been from Evesham, was the physician of

Pope Martin II (1281). Oldoino in his *Athenaeo Romano* mentions a series of books written by this Hugh of Evesham. They bear the titles *Medicinales canones and De genealogiis humanis*, "Medical Canons" and "On Human Genealogies." There is, besides, an opusculum translated by him from the work of Isaac, the well-known Jewish physician of the Middle Ages, *On Fevers*.

Just before this there had been a physician-pope, John XXI (1276-1277), who under the name of Peter of Spain had been looked up to as one of the most distinguished natural scientists of this interesting century. Dr. J. B. Petello, in an article in the international magazine of science, *Janus* (1897-1898), entitled "A Critical and Historical Study of the Knowledge of Ophtholomology of a Philosopher Physician Who Became Pope," gives an excellent account of the life of Pope John XXI. He does not hesitate to declare him "one of the most renowned persons of Europe during the thirteenth century from the point of view of the triple evolution of his extraordinary mind which caused him to make his mark in the physical sciences, in the metaphysical sciences and in the religious world." That a man who was as distinguished in medicine, as well as in science generally, as this *Petrus Hispanus*, should have been elected pope is the best possible proof that science and religion were on terms of very intimate relationship during the thirteenth century.

The physician of Pope Honorius IV was Taddeo Alderotti who was famous as a teacher of medicine and a writer on medical topics about this time. Alderotti's work represents what is best in medicine during this century. Alderotti's successor as physician at the papal court was scarcely, if any, less distinguished. This was Simon Januensis, Simon of Genoa, medical attendant to Pope Nicholas IV (1288-1292). Simon did much to make the use of opium more scientific than it had been and worked out rules for its administration.

Simon is best known in the history of medicine for what was probably the first important dictionary of medicine. This was his *Synonyma medicinae* or *Clavis sanationis*, "The Key of Health." Steinschneider declares this to be one of the most important works in the field of synonymics.

The papal physician to Pope Boniface VIII (1298-1303) was William of Brescia to whom Henry of Mondeville, the great French surgeon of the end of the thirteenth century whose work represents an important landmark in the history of surgery, dedicated his volume. Henry's prestige makes the dedication a significant compliment. He says, "I began to write this work on the proposal and request of William of Brescia, distinguished professor in the science of medicine and formerly physician to Pope Boniface VIII and Benedict XI and Clement V, the present pope." Clement V was the first of the Avignon popes and he had for his attending physician toward the end of his life Arnold of Villanova, the most distinguished living physician of his time. His summons as consultant physician attracted all the more attention because Arnold himself died on the journey. Subsequent Avignon popes had for their personal attending physician the famous Guy de Chauliac, often called the father of French surgery. His textbook which has come down to us shows very clearly how great a surgeon he was.

During the fourteenth century the list of recorded papal physicians becomes too long to mention them all, but some of them wrote books that were considered of sufficient importance to be published after the invention of printing in the following century. Among them are Gentilis who wrote on phthisis and on medical dosage as well as other books; Dina del Garbo, celebrated for his scholarliness, who is known in the history of medicine as "Dino the Expounder" because of his work in the exposition of Galen and Avicenna. He was the son of a distinguished surgeon, Bruno del Garbo, and his son Thomas succeeded him as papal physician and wrote a commentary on Galen's book on fevers and other volumes which were subsequently printed. The Casini, a father, son and brother, were physicians to Pope Urban VI, Martin V and Innocent VII. Isadorus Ugurgerius says that "among the philosophers and physicians of their time they held easily the first place." This was the early fifteenth century. About the middle of the century John Baptist Verallus was papal physician and archiater or chief physician to the city of Rome. Verallus is famous for his work in improving the health of Rome itself and represents one of the pioneers in public hygiene. In my book, *The Century of Columbus*, I reviewed some of these surprising Italians who anticipated our modern hygiene, among whom Verallus was one of the pioneers.

Another papal physician of this Renaissance period was Bernard Garzonis, physician to Pope Nicholas V, who had been a noted professor in the medical school at Bologna before being summoned to Rome. He died in Rome of the pest in 1454 devoting himself to the care of those suffering from the disease. His successor was Laurentius Roverella of Ferrara of whom his contemporaries speak in the highest praise for his erudition, his ability to teach and the charity of his life. He was professor at Ferrara and subsequently at Padua, whence he went to Paris where he was crowned with the doctorate; and after the death of Pope Nicholas V, who summoned him to Rome, he went frequently as an ambassador for the Dukes of Ferrara.

The Renaissance popes selected some of the distinguished scholars of that time for their medical attendants. One of the physicians to Pope Sixtus IV, was Onoftio de Onofriis who had been a professor at the University of Perugia. Another of this pope's physicians was John Philip de Lignamine, who wrote a book on food and drink. Later this distinguished scholar interested himself in the new art of printing and was the publisher of a well-known series of finely printed incunabula. One of the most important medical scientists at the end of the sixteenth century was Benedict of Nursia. There is some question whether he was papal physician or not, but he wrote a book on medical botany, considered a classic in the subject, which he dedicated with permission to Pope Sixtus IV and he seems to have been summoned in consultation to see this pope during an illness. The physicians to Pope Alexander VI, who was of Spanish origin, were mainly of Spanish extraction. The best-known of them was Alexander de Espinosa who is praised by Baldo Baldi in his work on *The Oriental Opobalsam*. Mandosius who has written a history of the papal physicians speaks of Espinosa as "a man of great erudition, endowed with high intelligence and with a great zeal for promoting the health of humanity." Gaspar Torella, who was also a Spaniard and another of the papal physicians of this time, wrote a book *On Diet for the Preservation of Health*, in the form of a dialogue on eating and drinking, which became rather popular. Torello was made a bishop by Pope Julius II and his volume on diet is dedicated to that pope. Petrus Pintor, a Spaniard from Valencia, was "the beloved friend and physician of Pope Alexander VI." He wrote, *Compilation of the Opinions of All the Doctors on Prevention and Cure*

of the Pestilence. Under the word pestilence was included at that time any form of epidemic. This volume was published in Rome in 1499 and was very well known by his contemporaries.

The physician of Pope Calixtus III as well as of Pius II was Joannes Serninus, a native of Siena. He had been archiater or director of public health in a number of Italian cities and did much to develop disease prevention by quarantine. He was summoned to Rome by Pope Calixtus III to whom is attributed a famous Bull (that has never been found, however) against Halley's comet - on its appearance in 1456 - as a harbinger and bringer of disease. The intimate relations between Serninus, the leading public health man of his day, and the pope, are the best refutation of the slander.

The Renaissance popes chose for their physicians, as a rule, men distinguished for their knowledge of Greek medicine. Many of them were among the most distinguished physicians and writers on medicine of that erudite period. One of them, Paulus Jovius, physician to Pope Clement VII, is better known for his historical and literary works than for his medical achievements. He was deeply interested in natural history and the books which he wrote on Roman fishes and on the Orkney Islands have a niche of their own in natural history.

About the middle of the sixteenth century a very distinguished group of men were papal physicians. Among them was Antonio Musa Brasavola, the physician to four popes, as well as to the Duke of Este, who was called in consultation to Henry VIII of England and Francis I of France. After him came Eustachius, the great anatomist, after whom the tube is named; Columbus, discoverer of the circulation of the blood in the lungs; Varolius, after whom the pons in the brain is named; Cesalpinus, who described the circulation of the blood in the body before Harvey; and Ferri, who wrote on gunshot wounds and was the greatest military surgeon of his time.

At the beginning of the eighteenth century came Lancisi, the author of two works "of capital importance" on sudden death and on aneurysm (Garrison). Morgagni, the father of pathology, was the intimate personal friend of Benedict XIV and Clement XIII who insisted that he should stay at the papal palace whenever he was in

Rome. Professor Cotugno of Naples, the first to call attention to the existence of the spinal fluid, was physician to Pope Pius VI. One of the physicians of Pope Pius VII was Flajani, to whom we owe a description of Graves's disease long before either Graves or Basedow had recognized it. The medical attendant of Pope Leo XIII and Pius X was Dr. Joseph Lapponi, author of a book on spiritualism and hypnotism. After his death the papal physician was Professor Marchiafava whose excellent work on malaria and on the pathology of alcoholism make him a worthy successor to a long line of distinguished men.

Modern Reform of Hospitals

The greatest surprise in the history of modern medicine is the story of the sad decadence of hospitals and of nursing during the seventeenth, eighteenth and early nineteenth centuries, which is to be noted particularly among the English and German speaking people. Miss Nutting and Miss Dock, in their *History of Nursing*, have a chapter on "The Dark Period of Nursing" which begins, "It is commonly agreed that the darkest known period in the history of nursing was that from the latter part of the seventeenth up to the middle of the nineteenth century." "They go so far as to say that "the status of the nurse sank to an indescribable level of degradation." Jacobsohn in his articles on the history of care for the ailing in the German *Journal of Care for the Ailing* (1898) said: "In the municipal and state institutions of this period (the eighteenth century) the beautiful gardens, roomy halls and springs of water of the old cloister hospitals of the Middle Ages were not heard of, still less the comforts of their friendly interiors."

The reason for this was, as pointed out by these historians, that "the religious orders had been suppressed and no substitute organization given, so that it might almost be said that no nursing class at all existed during this period." Unfortunately about this time there was, also, a serious decadence in surgery mainly due to the fact that the hospitals were old and extremely dirty, reeked with infectious material and therefore it was quite impossible to do successful surgery in them.

The attendants who replaced the members of the nursing religious orders were of a sadly inferior type. "We always take them without a character," said an English physician of the nineteenth century, "because no respectable woman will take such work." Dickens's awful picture of Sairey Gamp is not the caricature that many people take it to be, but an actual bit of history true to life. As Miss Nutting and Miss Dock say, "The drunken and untrustworthy Gamp was the only professional nurse."

Reform was sadly needed and it came largely through the re-establishment of the religious orders for women and especially for

hospital work in the English-speaking countries. The reform is usually attributed almost entirely to Miss Florence Nightingale; but, as we shall see, she had been preceded in her work of reforming hospitals and nursing by the Sisterhoods.

When, in the early part of the nineteenth century, the hospitals of the English-speaking countries particularly had "sunk to an almost indescribable level of degradation," the hearts of two Irish women were moved by the awful conditions and they set about organizing means for improvement. This chapter of hospital reform is the story of the Irish Sisters of Charity and of Mercy, one which ought to be well known by all those who are interested in the history of social service.

The first step in reform came from Mother Mary Aikenhead, foundress of the Irish Sisters of Charity. As a young woman she was brought in contact with some of the poorest parts of Dublin and became intensely interested in the work of doing good for those who needed help so badly. Under the direction of the bishop of Dublin she organized a religious community whose motto was, "The charity of Christ urgeth us." There was no warrant in English law for any such religious foundation, for the religious orders had been suppressed; but the nuns began to be seen in the lanes and back streets of Dublin visiting the sick in their homes. After a time it was realized that they must have a hospital in Dublin, and, though many of her friends were opposed to it, Mother Aikenhead proceeded with the work. She sent three Sisters to Paris to be trained for a year in the care of the sick at La Pitié Hospital, thus securing intimate touch with the old Catholic traditions of nursing and hospital work.

Friends gave her the means to buy a fine old residence on Stephen's Green, Dublin, and Mother Aikenhead converted this into a hospital about 1820. It is still standing, a favorite place of pilgrimage for those interested in the revolution of the care for the ailing that began there. In spite of the criticisms of the undertaking on the score that it was not work suited for nuns, patients crowded to the Sisters new hospital in such numbers that the house next door had to be purchased and transformed into wards. Her work attracted so much attention that prominent visitors to Dublin came to see

Mother Aikenhead. Dr. Pusey, who had been with the leaders of the Oxford Movement, Newman and Keble, paid a number of visits. Bishop, afterwards Cardinal, Wiseman came fort a long interview; and Gerald Griffin, the poet, had a sister in the community and visited the hospital to meet the Superior.

Mother McAuley, who founded the Irish Sisters of Mercy, began with the idea of establishing a sort of society of secular ladies who, between the period of leaving school and settling in life, might without inconvenience to their families spend a few hours daily in instructing the poor or in interesting young girls in the better things of life. Only after a time did she realize that "a Higher Mind than hers had planned an institution different from what she had contemplated and her little society not without much opposition even among her nearest and dearest in the Church, came into existence." The new congregation devoted itself to the care of the poor and soon realized the need of a hospital. During an epidemic of cholera in 1833 Mother McAuley established herself with her sisters in a cholera hospital. The stricken population, in panic, was afraid to enter the hospital. It was only when they heard that the Sisters of Mercy were working with the doctors that their wild terror disappeared.

It is not surprising that after a time, though not until after Mother McAuley's death, there came the foundation of the great *Mater Misericordiae* hospital which has continued ever since to be one of the well-known institutions of Dublin.

These two orders, the Irish Sisters of Charity and of Mercy, are the pioneers in the reaction against the awful social abuses which existed at the beginning of the nineteenth century and which made the hospitals and other institutions of the poor such satires on humanity. When Florence Nightingale became interested in the care of the poor in hospitals she wrote Father, afterwards Cardinal Manning, and pleaded with him to secure for her the privilege of being trained in one of the houses of the Sisters in Ireland. She did not want to go as a visitor nor even as a postulant or novice. She wanted to receive the actual training of a Sister. She thought that it would be possible for her to wear the habit of the Sisterhood and to all appearances be a Sister with only the Mother Superior and the

chaplain in the secret that she was not. She valued very highly what the Sisters could do for her in the matter of training and she wanted to secure the benefit of it.

In June 1852, she wrote to Father Manning:

> For what training is there compared with that of a Catholic nun? Those ladies who are not Sisters have not the chastened temper, the Christian grace, the accomplished loveliness and energy of the regular nun. I have seen something of different kinds of nuns and am no longer young and do not speak from enthusiasm but from experience. "There is nothing like the training (in these days) which the Sacred Heart or the order of Saint Vincent gives to women.

She mentions both the Sisters of Mercy and the Sisters of Charity but the accomplishment of her desire in the matter was out of the question. When a little later the Crimean War with its awful conditions came to disturb the English people and the nursing care for them broke down completely, Father Manning wrote to Mary Stanley, "Why will not Florence Nightingale give herself to the great work?" Florence Nightingale did and with her at a day's notice by her special request went five Sisters of Mercy from Bermondsey, a branch of the Sisters of Mercy from Dublin which had come over to London only a few years before. They served beside her amid the hardships, and it is not surprising that when one of the nuns came down with fever, Miss Nightingale insisted upon nursing her herself. When the Mother Superior was going back to England, Florence Nightingale wrote to her:

> I do not presume to express praise or gratitude to you, Reverend Mother, because it would look as though I thought you had done this work not unto God but unto me. You were far above me in fitness for the general superintendency, in worldly talent of administration, and far more in the spiritual qualifications which God values in a superior; my being placed over you was my misfortune, not my fault. What you have done for the work no one can

ever say. I do not presume to give you any other tribute but my tears.

The Irish Sisters of Charity and of Mercy spread all over the English-speaking world. Both of them have a large number of hospitals as well as schools in Australia and New Zealand and Tasmania. The Sisters of Mercy have spread all over the English-speaking world following the Irish immigrants wherever they went. A number of very prominent hospitals here in America are under their charge and some of them are very well known. Mercy Hospital, Pittsburgh, the oldest of them, is one of the most important hospitals in the country. It was in Mercy Hospital, Chicago, that the distinguished American surgeon, Dr. John B. Murphy, did much of his great work. English and American authorities on the history of surgery have gone so far as to declare that this was probably the best surgery that had been done anywhere for the past three hundred years. There are over 20,000 Sisters of Mercy in various countries at the present time, some 7,000 of them here in America. It is thought that by the time the community is one hundred years old in 1931 there will be over 25,000 Sisters in it engaged in all sorts of good work, but with their hospitals as probably the most significant of the institutions of which they have charge.

The Sisters of Mercy furnished the best evidence as to what the Church's work in the olden time was both for hospitals and for the ailing poor. At the same time they served to demonstrate very clearly that the incentive furnished by Catholicity to this sort of work continues to be eminently successful in providing the helpers who are needed for the exercise of Christian charity. The hospitals of the Sisters of Mercy in the United States particularly are models of technical installation, and wherever there has been the opportunity in recent years to rebuild or add to them, they represent the very latest word in hospital equipment. They are very often full to capacity when secular hospitals in the neighborhood have a number of vacant beds. Patients who have been treated in the Sisters' hospitals, even those who are not of the faith, want as a rule if they have to repeat their experience of hospital care to be under the charge of the Sisters. The real spirit of Christian charity is still alive and makes itself felt, while at the same time there is that technical training which enables some of the best surgical work of

our day to be done in these hospitals,

Religious Healing

Ir is sometimes said, even by those who think that they know much about the matter, that the Catholic Church is very much more interested in religious healing than in medical healing, that is to say much more occupied with cures by means of Masses and prayers, the invocation of the saints and the touch of relics and the visitation of shrines, than by the use of medicaments of various kinds and the application of surgery. It is even asserted that surgery was looked on askance, and forbidden to clerics as well as discouraged in other ways so as to foster more devotion to religious means of cure. Any such expressions are founded on the most absolute ignorance of the Church's position with regard to religious and medical healing. The policy of the Church has been most wise in maintaining a certain equilibrium of forces between these two modes of healing. Churchmen have felt that they were not exclusive of each other but complementary.

Prayer, by which is meant not a formula of words but a lifting up of the mind and heart to God, is an extremely valuable means for soothing the mind and making it ever so much less amenable to disturbing influences than it may be when left to itself. In our day we have come to realize very clearly that an unworried state of mind is an extremely important factor for bringing about the cure of a great many diseases. Dis-ease is after all, etymologically, only discomfort and a great many of the affections of mankind, even those which are complained of the most, are largely matters of mental worry and over-solicitude about oneself. When the mind is at rest, nature's physical resources can be used to much better advantage. In the midst of worry and solicitude there is a dissipation of energy that makes recovery even from purely physical disease much more difficult than it would be under favorable conditions of mind. When people are very much discouraged, it is a difficult task to put them on the road to recovery. Prayer with its promise of direct communication with Infinite Power, gives people new confidence in themselves and accomplishes much in predisposing even those who are seriously ailing to get better.

If prayer and the various religious inspirations that are used

accomplished nothing more than to predispose the mind favorably toward cure, that would mean much for recovery. The Catholic Church teaches, however, that besides this mental or psychological result of prayer there is, in certain cases at least, a real influence from on High that favors the cure of disease if not actually bringing it about. The effect of this has been particularly noted in connection with certain shrines or localities where for some reason the Infinite stoops to the finite and performs miracles of healing.

The Church's teaching is not that all the ailing are to go to such places to be cured nor that all those who go there will be sure of a cure, but that some of them for special reasons will be granted the favor of a cure as a demonstration that the arm of the Lord is not shortened and that wonders of healing are being worked in our day. The Church has been very careful to insist that there should be proper investigation of the patient's history and the proper diagnosis of their actual condition made by physicians. Only when there is assurance of a cure of physical and not merely psycho-neurotic disease is any question raised of a miraculous cure.

While the Church promulgated these ideas with regard to the efficacy of prayer and devotion at shrines, her attitude never was that this should be the only recourse of the ailing. On the contrary the Church insisted that everyone ought to take every possible advantage of the healing power of medicine and the various modes of treatment as well as of surgery. When these failed, recourse might be taken to religious healing. A maxim often quoted by churchmen is, "Pray as if everything depended on the Lord, but do everything that you can as if all depended on you."

In accordance with this the popes selected as their - personal physicians men who had reached distinction in medicine and surgery among their fellows. Their good example undoubtedly gave a prestige to the medical profession and encouraged the consultation of medical scientists, rather than of the quacks and charlatans whom we have always had with us, by the mass of the people. Physicians and churchmen were on the best of terms. Abundant evidence for this is to be found throughout this book.

It was this intimate relationship between the popes and leading physicians that undoubtedly brought the Church authorities to

secure the bodies of the friendless poor for dissecting purposes. It has sometimes been said that the Church was opposed to dissection but there is not the slightest evidence for this and copious proof of encouragement of scientific anatomical study. A number of higher ecclesiastics actually asked that their bodies might be the subject of special study after their death so that diagnosis might be benefited. As we have pointed out elsewhere, when the Church's influence was not felt, the old very human deterrence for mutilation of the body left anatomists without proper supply of subjects even in very modern times.

The missionaries of the Church who wandered into distant countries were always intent on finding any novel drugs or substances that might be useful in the treatment of disease. As the result of that eagerness to secure for the people in Europe the benefit of any medicine the natives of foreign countries might have found, the missionaries are responsible for the introduction of half a dozen of our most important drugs. Cinchona, for instance, we owe to the Jesuits and for long it was called "Jesuits bark." The Saint Ignatius bean, a source of strychnine, is another example. *Cascata sagrada* comes to us also through the missionaries as well as balsam of Peru, *grindelia robusta* and others.

The Church had much to do with limiting the activities of quacks and charlatans of various kinds and legislated against alchemy so far as that was a fraud. Superstition with regard to the influence of the stars on human life was condemned by the Fathers. The physicians insisted on emphasizing its bodily effects, but the Church's position helped to keep out many abuses in connection with astrology. Priests and even bishops are but human and have at times been carried away by new-fangled, but inefficacious, methods of healing. The Church's influence has constantly been exerted in the right direction. Professor Osler once said that it seemed to be almost a rule in modern times that the nearer clergymen were to the Council of Trent, the nearer they were to orthodoxy in medicine.

About This EBook

The text of this ebook is taken from the book *The Catholic Church and Healing*, by James J Walsh. The edition used was published by the MacMillan Company in New York, New York in 1928, and reprinted in 1929.

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The cover image is a detail of the painting *Jesus heals a blind man*, date and artist unknown, church of Saint-Étienne, Caen, France. Photographed on 13 November 2021 by Chabe01, and the image swiped from Wikimedia Commons.

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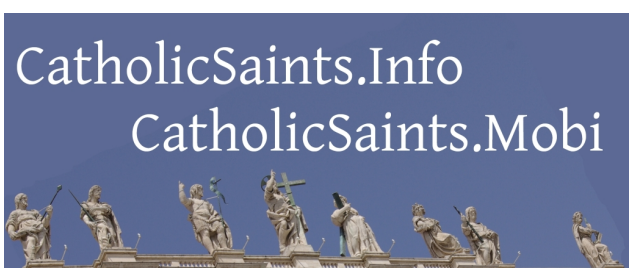
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